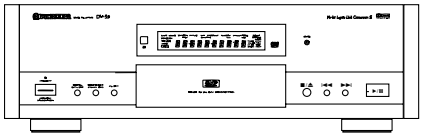
PIONEER®
The Art of Entertainment

Service Manual



ORDER NO.
RRV1944

DVD PLAYER

DV-09

DV-S9

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Region restriction code (region number)
	DV-09	DV-S9		
KU/CA	◯	–	AC120V	1
L/TA	–	◯	AC110V	3

• Refer to the service guide RRV1896 for DV-505.
IC information is described in the service guide.

CONTENTS

1. SAFETY INFORMATION ····· 2
2. EXPLODED VIEWS AND PARTS LIST ····· 3
3. SCHEMATIC DIAGRAM ····· 14
4. PCB CONNECTION DIAGRAM ····· 34
5. PCB PARTS LIST ····· 49
6. ADJUSTMENT ····· 58
7. GENERAL INFORMATION ····· 67
   7.1 PARTS ····· 67
      7.1.1 IC ····· 67
      7.1.2 DISPLAY ····· 73
   7.2 DISASSEMBLY ····· 74
   7.3 BLOCK DIAGRAM ····· 78
8. PANEL FACILITIES AND SPECIFICATIONS ···· 79

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

IMPORTANT
THIS PIONNER APPARATUS CONTAINS LASER OF CLASS 1.
SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER : 7 mw
WAVELENGTH : 650 nm

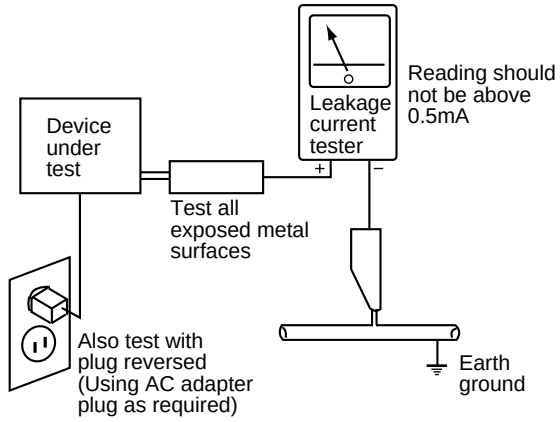
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.


Leakage current tester
Reading should not be above 0.5mA
Device under test
+
–
Test all exposed metal surfaces
Also test with plug reversed (Using AC adapter plug as required)
Earth ground

AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

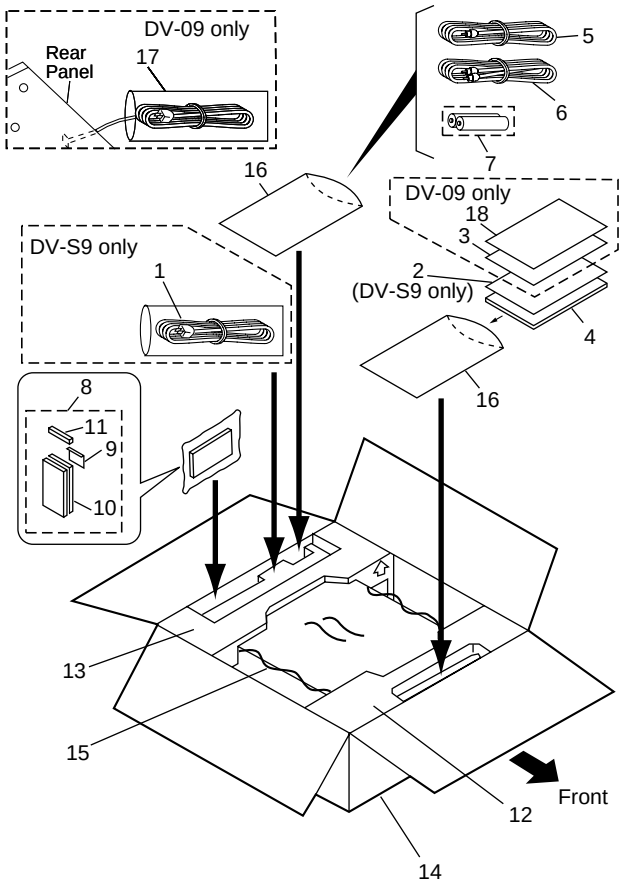
Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *Screws adjacent to ▼ mark on product are used for disassembly.*

2.1 PACKING



(1) PACKING PARTS LIST

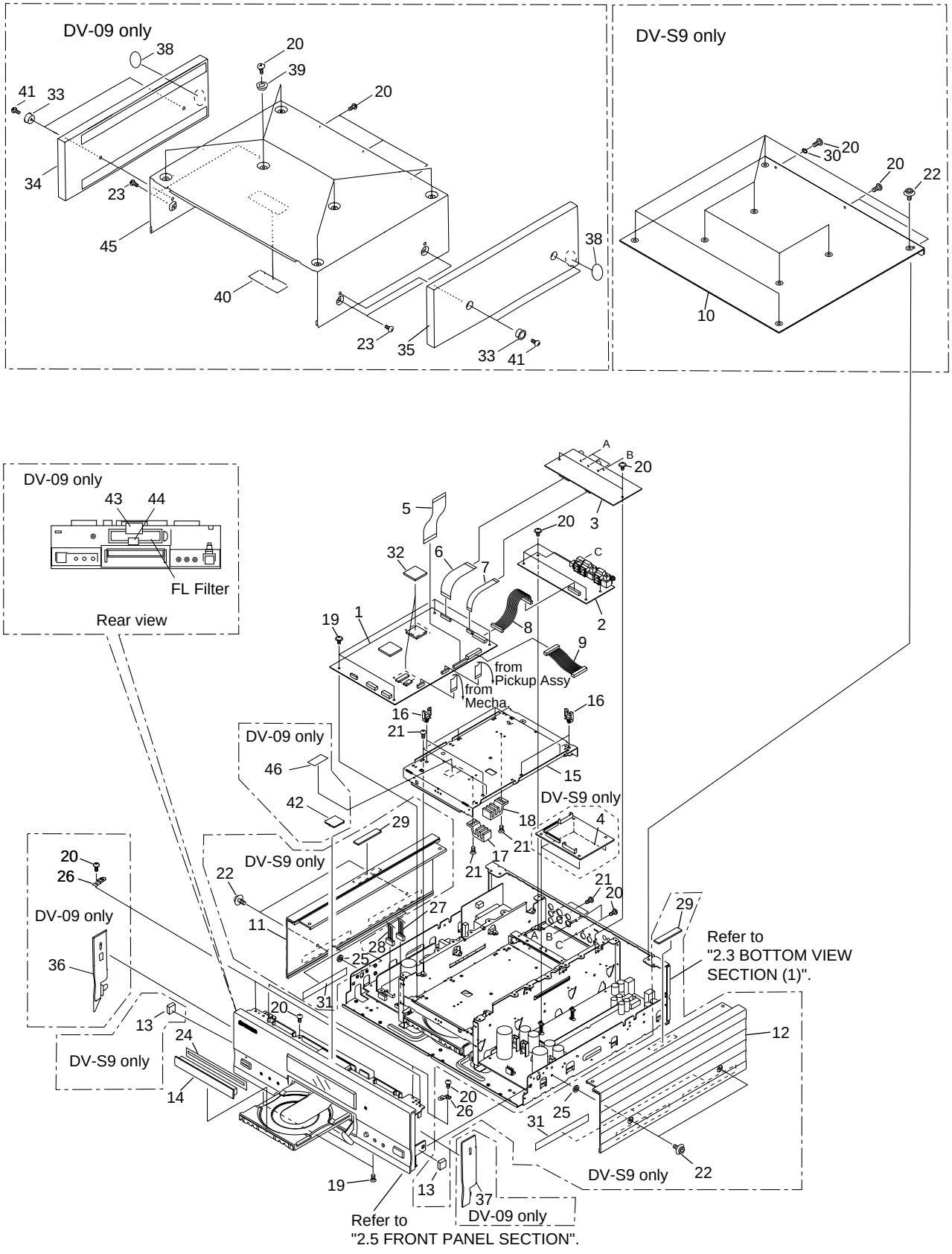
Mark	No.	Description	Part No.
⚠	1	Power Cord	See Contrast table (2)
NSP	2	Regular User's Card	See Contrast table (2)
NSP	3	Warranty Card	See Contrast table (2)
	4	Operating Instructions	See Contrast table (2)
	5	Audio Cord (L=1.5m)	VDE1023
	6	Video Cord (L=1.5m)	VDE1024
NSP	7	Dry Cell Battery (R03, AAA)	VEM-022
	8	Remote Control Unit	See Contrast table (2)
	9	Battery Cover	See Contrast table (2)
	10	Case (Below)	See Contrast table (2)
NSP	11	Filter	VNK2063
	12	Pad (F)	See Contrast table (2)
	13	Pad (R)	See Contrast table (2)
	14	Packing Case	See Contrast table (2)
	15	Mirror Mat Sheet	VHL1018
	16	Polyethylene Bag (0.03x230x340)	Z21-038
	17	Mirror Mat Bag	See Contrast table (2)
NSP	18	Caution Card	See Contrast table (2)

(2) CONTRAST TABLE

DV-09/KU/CA and DV-S9/L/TA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			DV-09 /KU/CA	DV-S9 /L/TA	
⚠	1	Power Cord	Not used	ADG7013	
NSP	2	Regular User's Card	Not used	VRY1110	
NSP	3	Warranty Card	ARY1026	Not used	
	4	Operating Instructions (English)	VRB1188	Not used	
	4	Operating Instructions (Chinese)	Not used	VRC1071	
	8	Remote Control Unit (CU-DV011)	VXX2532	Not used	
	8	Remote Control Unit (CU-DV010)	Not used	VXX2525	
	9	Battery Cover	DNK2286	VNK4177	
	10	Case(Below)	VNK2062	VNK4178	
	12	Pad (F)	VHA1218	VHA1210	
	13	Pad (R)	VHA1219	VHA1211	
	14	Packing Case	VHG1733	VHG1754	
	17	Mirror Mat Bag	VHL1004	Not used	
NSP	18	Caution Card	VRN1011	Not used	

2.2 EXTERIOR SECTION



(1) EXTERIOR SECTION PARTS LIST

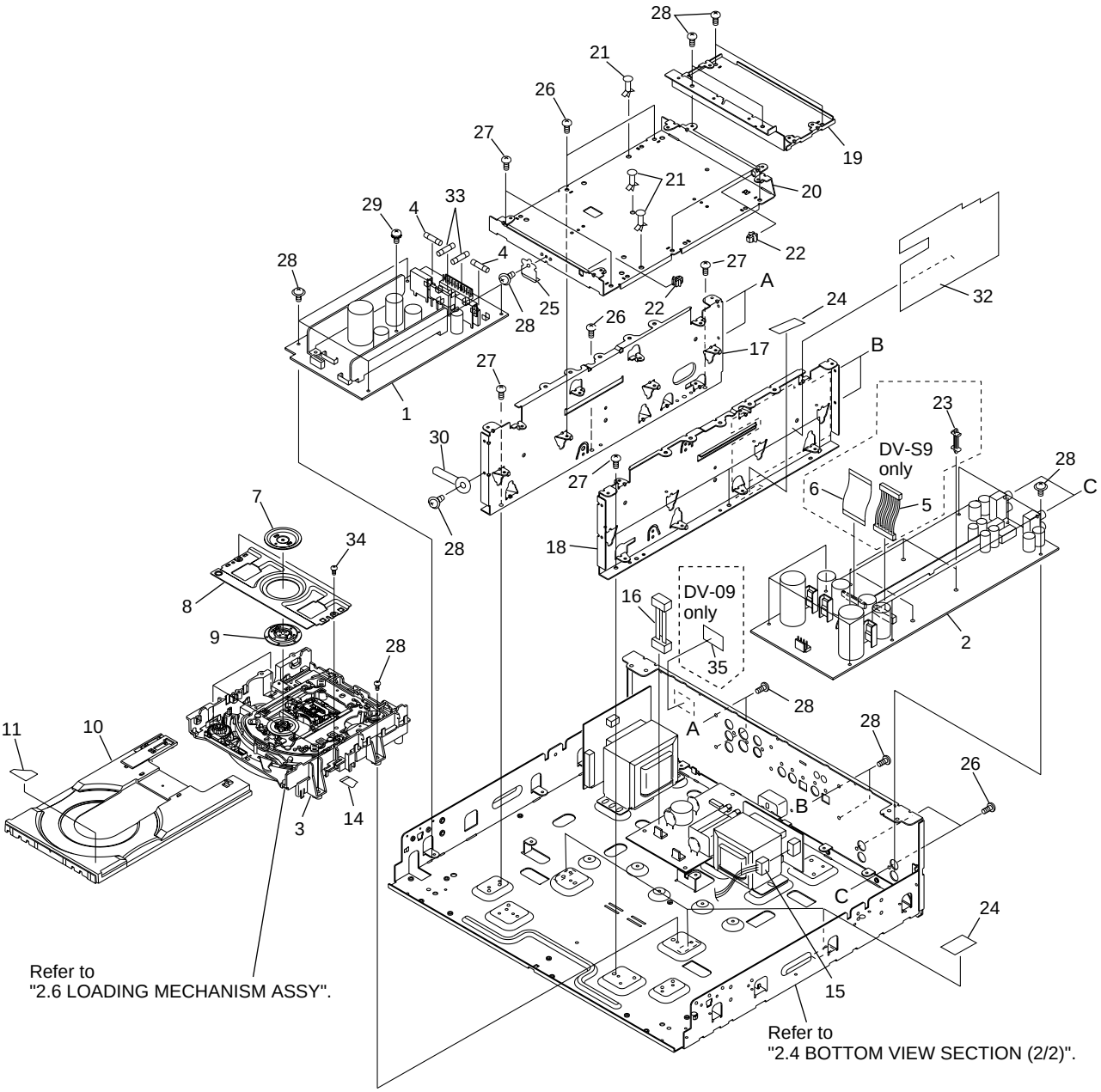
Mark	No.	Description	Part No.
	1	DVD MAIN Assy	VWS1337
	2	DOUT Assy	See Contrast table (2)
	3	VOUT Assy	VWG1905
	4	DIRB Assy	See Contrast table (2)
	5	Flexible Cable (28P)	See Contrast table (2)
	6	Flexible Cable (19P) (DVD MAIN CN508-VOUT CN601)	VDA1666
	7	Flexible Cable (9P) (DVD MAIN CN507-VOUT CN602)	VDA1665
	8	Housing Assy (12P) (DVD MAIN CN506-DOUT CN701)	VKP2173
	9	Housing Assy (13P)	See Contrast table (2)
	10	Top Aluminum	See Contrast table (2)
	11	Side Aluminum L	See Contrast table (2)
	12	Side Aluminum R	See Contrast table (2)
NSP	13	Cushion	See Contrast table (2)
	14	Tray Panel	See Contrast table (2)
	15	Main Shield	VNE2137
NSP	16	Wire Clip	VEC1181
	17	FTS Heat Sink	VNH1053
	18	AV1 Heat Sink	VNH1052
	19	Screw	BBP30P080FMC
	20	Screw	ABZ30P080FCC
	21	Screw	BBT30P080FCC
	22	SH Screw	See Contrast table (2)
	23	Screw	See Contrast table (2)
	24	Door Packing	VEC1995
	25	Washer	See Contrast table (2)
	26	Top Stay	VNE2139
	27	Housing Assy (7P) (DVD MAIN CN502-SYPS CN32)	VKP2177
	28	Housing Assy (8P) (DVD MAIN CN501-SYPS CN33)	VKP2170
	29	Damper	See Contrast table (2)
	30	Washer	WH30FUC
	31	Cushion	See Contrast table (2)
	32	Gap Pad	VEC1997
	33	Wood Coller	See Contrast table (2)
	34	Side Wood L	See Contrast table (2)
	35	Side Wood R	See Contrast table (2)
	36	Gold Mole L	See Contrast table (2)
	37	Gold MoleR	See Contrast table (2)
	38	UL Caution Card	See Contrast table (2)
	39	Washer	See Contrast table (2)
	40	65 Label	See Contrast table (2)
	41	Screw	See Contrast table (2)
NSP	42	Rubber Spacer	See Contrast table (2)
NSP	43	Spacer A	See Contrast table (2)
NSP	44	Spacer B	See Contrast table (2)
	45	Bonnet S	See Contrast table (2)
	46	Fuse Caution Label	See Contrast table (2)

(2) CONTRAST TABLE

DV-09/KU/CA and DV-S9/L/TA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			DV-09 /KU/CA	DV-S9 /L/TA	
	2	DOUT Assy	VWG1902	VWG1901	
	4	DIRB Assy	Not used	VWG1897	
	5	Flexible Cable (28P)	VDA1663	VDA1662	
	9	Housing Assy (13P)	VKP2172	VKP2171	
	10	Top Aluminum	Not used	VAH1288	
	11	Side Aluminum L	Not used	VAH1286	
	12	Side Aluminum R	Not used	VAH1287	
NSP	13	Cushion	Not used	DEB1115	
	14	Tray Panel	VNK4242	VNK4241	
	22	SH Screw	Not used	PBA1049	
	23	Screw	BBZ40P080FZK	Not used	
	25	Washer	Not used	WA85F170M160	
	29	Damper	Not used	VEB1172	
	31	Cushion	Not used	VEC1996	
	33	Wood Coller	PNW1238	Not used	
	34	Side Wood L	VAP1032	Not used	
	35	Side Wood R	VAP1033	Not used	
	36	Gold Mole L	VAH1295	Not used	
	37	Gold MoleR	VAH1296	Not used	
	38	UL Caution Card	AAX-313	Not used	
	39	Washer	ABE1009	Not used	
	40	65 Label	ORW1069	Not used	
	41	Screw	PBA1038	Not used	
NSP	42	Rubber Spacer	VEB1252	Not used	
NSP	43	Spacer A	VEB1287	Not used	
NSP	44	Spacer B	VEB1288	Not used	
	45	Bonnet S	VXX2582	Not used	
	46	Fuse Caution Label	VRW1728	Not used	

2.3 BOTTOM VIEW SECTION (1/2)



(1) BOTTOM VIEW SECTION (1/2) PARTS LIST

Mark	No.	Description	Part No.
	1	SYPS Assy	VWR1289
	2	AUDIO Assy	See Contrast table (2)
NSP	3	Loading Mechanism Assy	VWT1150
⚠	4	Fuse (FU3, FU4 : 3A)	REK1080
	5	Housing Assy (13P) (AUDIO CN101-DIRB CN811)	See Contrast table (2)
	6	Flexible Cable (28P) (AUDIO CN111-DIRB CN812)	See Contrast table (2)
	7	Clamper Plate	VNE2068
	8	Bridge	VNE2069
	9	Clamper	VNL1738
	10	Tray	See Contrast table (2)
	11	Tray Label	VRW1628
	12	• • • • •	
	13	• • • • •	
	14	Flexible Cable (12P) (LOSB CN301-DVD MAIN CN107)	VDA1664
	15	Housing Assy (4P) (AUDIO CN351-TRSA CN12)	See Contrast table (2)
⚠	16	Housing Assy (3P) (LSFB CN2-TRSB CN21)	See Contrast table (2)
	17	Side Wall L	VNE2135
	18	Side Wall R	VNE2136
	19	Trans. Shield	VNE2138
	20	Main Shield	VNE2137
NSP	21	Card Spacer	QEC1012
	22	PCB Fixing Base	DEC1231
	23	PCB Holder	See Contrast table (2)
	24	Sheet	VEX1022
	25	Earth Plate B	VBK1076
	26	Screw	BBT30P080FCC
	27	Screw	BBZ30P060FZK
	28	Screw	ABZ30P080FCC
	29	Screw	BBP30P080FMC
	30	Cord Clamper	RNH-184
	31	• • • • •	
	32	Sheet	VEC1991
⚠	33	Fuse (FU5, FU6 : 2A)	REK1078
	34	Screw	BPZ26P080FZK
NSP	35	Fuse Caution Label	See Contrast table (2)

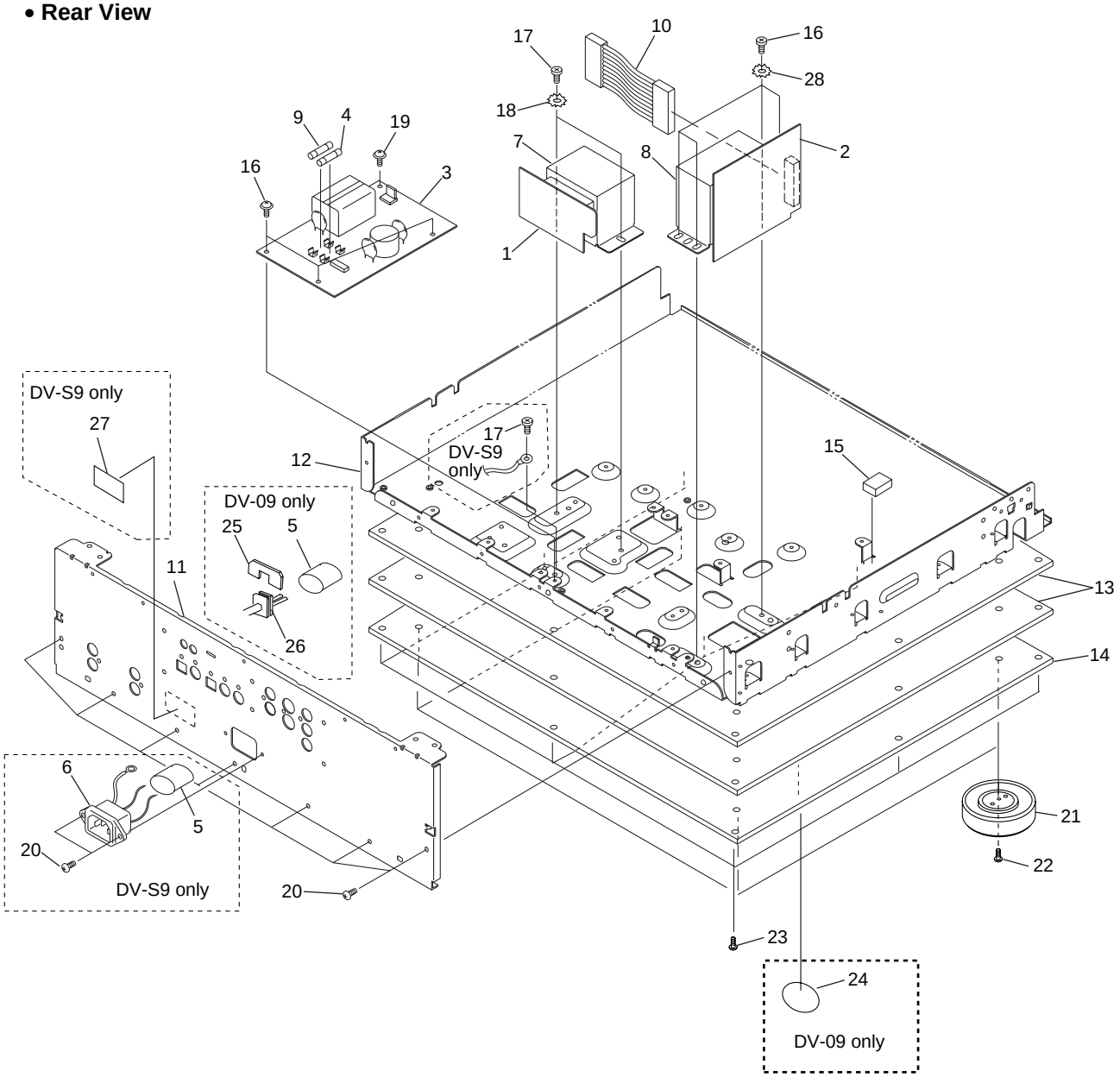
(2) CONTRAST TABLE

DV-09/KU/CA and DV-S9/L/TA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			DV-09 /KU/CA	DV-S9 /L/TA	
	2	AUDIO Assy	VWV1591	VWV1590	
	5	Housing Assy (13P)	Not used	VKP2171	(AUDIO CN101-DIRB CN812)
	6	Flexible Cable (28P)	Not used	VDA1662	(AUDIO CN111-DIRB CN811)
	10	Tray	VNK4244	VNK4243	
	15	Housing Assy (4P)	VKP2185	VKP2187	(AUDIO CN351-TRSA CN12)
⚠	16	Housing Assy (3P)	VKP2192	VKP2166	(LSFB CN2-TRSB CN21)
	23	PCB Holder	Not used	VEC1624	
NSP	35	Fuse Caution Label	VRW-548	Not used	

2.4 BOTTOM VIEW SECTION (2/2)

- **Rear View**



(1) BOTTOM VIEW SECTION (2/2) PARTS LIST

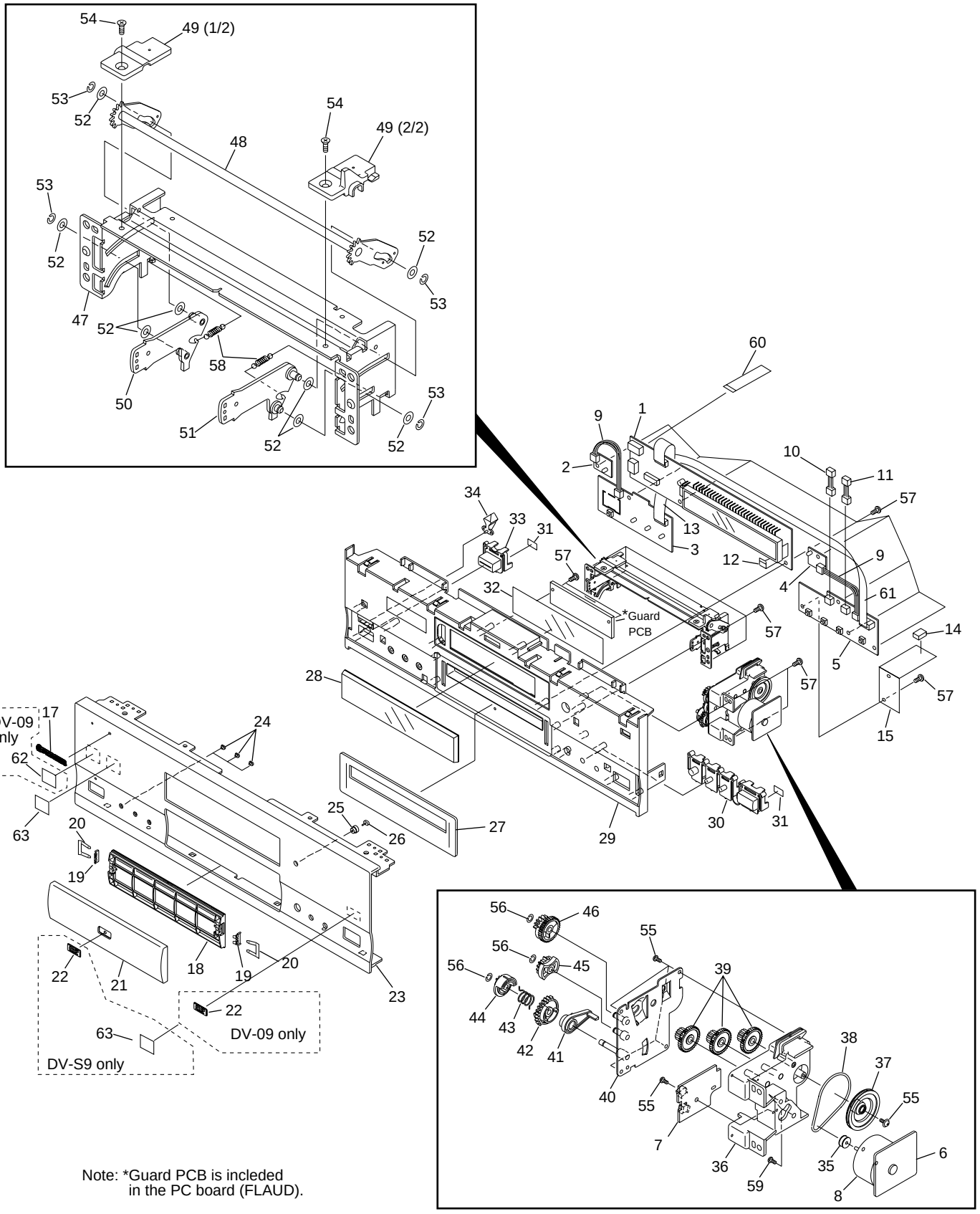
Mark	No.	Description	Part No.
NSP	1	TRSA Assy	See Contrast table (2)
NSP	2	TRSB Assy	VWR1300
NSP	3	LSFB Assy	VWR1293
⚠	4	Fuse (FU2 : 1A)	REK1075
	5	UL Tube	VEC1651
⚠	6	AC Inlet Assy (3P)	See Contrast table (2)
⚠	7	Power Transformer (Audio)	See Contrast table (2)
⚠	8	Power Transformer (Main)	See Contrast table (2)
⚠	9	Fuse (FU1 : 500mA)	VEK1009
⚠	10	Housing Assy (10P) (TRSB CN22-SYPS CN31)	See Contrast table (2)
	11	Rear Panel	See Contrast table (2)
NSP	12	Under Base	VNA1942
NSP	13	Bottom Plate	PNA2376
NSP	14	Bottom Plate A	VNA1943
	15	Clamper Cushion	VEC1271
	16	Screw	ABZ30P080FCC
	17	Screw	IBZ40P060FCC
	18	Washer	WH40FUC
	19	Screw	BBP30P080FMC
	20	Screw	BBT30P080FCC
	21	Insulator Assy	VXA2368
	22	Screw	ABA1082
	23	Screw	ABA1193
	24	UL Caution Card	See Contrast table (2)
	25	AC Cord Spacer	See Contrast table (2)
⚠	26	AC Power Cord	See Contrast table (2)
NSP	27	Caution Label	See Contrast table (2)
NSP	28	Washer	WH30FUC

(2) CONTRAST TABLE

DV-09/KU/CA and DV-S9/L/TA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			DV-09 /KU/CA	DV-S9 /L/TA	
NSP	1	TRSA Assy	VWR1298	VWR1297	
⚠	6	AC Inlet Assy (3P)	Not used	VKP2174	
⚠	7	Power Transformer (Audio)(AC120V)	VTT1152	Not used	
⚠	7	Power Transformer (Audio)(AC110V)	Not used	VTT1155	
⚠	8	Power Transformer (Main)(AC120V)	VTT1151	Not used	
⚠	8	Power Transformer (Main)(AC110V)	Not used	VTT1154	
	10	Housing Assy (10P)	VKP2193	VKP2168	(TRSB CN22-SYPS CN31)
	11	Rear Panel	VNA1940	VNA1987	
	24	UL Caution Card	AAX-313	Not used	
	25	AC Cord Spacer	ANG1153	Not used	
⚠	26	AC Power Cord	VDG1046	Not used	
NSP	27	Caution Label	Not used	VRW1737	

2.5 FRONT PANEL SECTION



Note: *Guard PCB is incleded in the PC board (FLAUD).

(1) FRONT PANEL SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	FLKB Assy	See Contrast table (2)
NSP	2	STBY Assy	VWG1922
NSP	3	PWSB Assy	VWG1916
NSP	4	LEDB Assy	VWG1919
NSP	5	PLSB Assy	VWG1913
NSP	6	DRMB Assy	VWG1932
NSP	7	DRSB Assy	VWG1930
	8	DC Motor/0.75W(Door)	PXM1010
	9	Connector Assy	PG03KK-E07
	10	Connector Assy	PG03KK4E07
	11	Connector Assy	PG03KK2E07
	12	Flexible Cable (14P) (FLKB CN403-DVD MAIN CN503)	VDA1661
	13	Flexible Cable (8P) (FLKB CN404-PWSB CN501)	VDA1668
NSP	14	Spacer	VEC-244
	15	VO Sheet FP	VEC1992
	16	• • • • •	
	17	Name Plate	See Contrast table (2)
	18	Door Base	See Contrast table (2)
	19	Earth Plate	VBK1074
	20	Clip	VBM1003
	21	Door Aluminum	See Contrast table (2)
	22	DVD Plate	See Contrast table (2)
	23	Front Aluminum	See Contrast table (2)
	24	Lens	PNW1257
	25	DVD Ring	VAK1006
	26	DISP Lens	PNW2113
	27	Shield Cushion	See Contrast table (2)
	28	FL Lens	See Contrast table (2)
	29	Panel Base	See Contrast table (2)
	30	Main Key	See Contrast table (2)

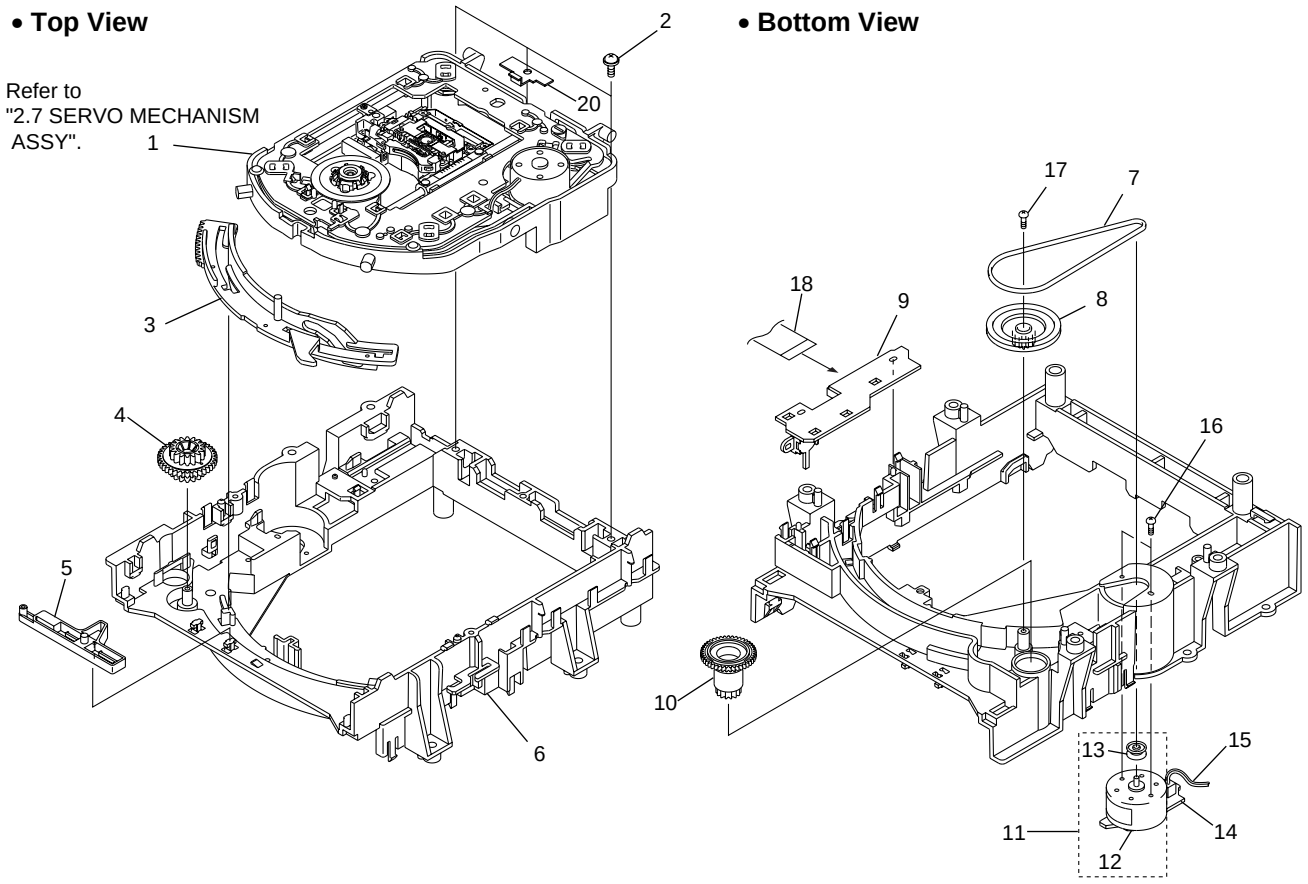
Mark	No.	Description	Part No.
	31	Tape	PNM1017
	32	FL Filter	See Contrast table (2)
	33	PW Button	See Contrast table (2)
	34	LED Lens	VNK4285
	35	Motor Pulley	PNW1634
	36	Motor Holder	VNL1796
	37	Gear Pulley	VNL1733
	38	Belt (Rubber)	PEB1288
	39	Gear (C)	VNL1047
	40	Gear Base Assy	VXA2365
	41	Switch Arm	VNL1797
	42	Drive Gear C	VNL1794
	43	Door Spring A	VBH1299
	44	Drive Gear D	VNL1795
	45	Drive Gear B	VNL1793
	46	Drive Gear A	VNL1792
	47	Door Support	VNE2140
	48	Drive Arm Assy	VXA2364
	49	Drive Shaft Holder	VNL1791
	50	Door Arm L Assy	VXA2362
	51	Door Arm R Assy	VXA2363
	52	Washer	WA32D080D025
	53	Washer	WT26D047D050
	54	Screw	CBZ26P060FMC
	55	Screw	Z39-019
	56	Washer	WT31D054D050
	57	Screw	BPZ30P080FCC
	58	Door Spring B	VBH1300
	59	Screw	BMZ26P040FMC
	60	Flexible Cable (10P) (FLKB CN405-SYPS CN34)	VDA1660
	61	Flexible Cable (8P) (FLKB CN402-PLSB CN523)	VDA1667
	62	THX Badge	See Contrast table (2)
NSP	63	DTS Label	VRW1732

(2) CONTRAST TABLE

DV-09/KU/CA and DV-S9/L/TA are constructed the same except for the following :

Mark	No.	Symbol and Description	Part No.		Remarks
			DV-09 /KU/CA	DV-S9 /L/TA	
	1	FLKB Assy	VWG1910	VWG1911	
	17	Name Plate	AAM7004	VAM1051	
	18	Door Base	VNK4240	VNK4239	
	21	Door Aluminum	VAH1285	VAH1284	
	22	DVD Plate	VAM1076	VAM1077	
	23	Front Aluminum	VAH1283	VAH1282	
	27	Shield Cushion	VEC1970	VEC1969	
	28	FL Lens	VEC1968	VEC1967	
	29	Panel Base	VNK4236	VNK4235	
	30	Main Key	VNK4238	VNK4237	
	32	FL Filter	VEC1966	VEC1965	
	33	PW Button	VNK4101	VNK4059	
	62	THX Badge	AAM7003	Not used	

2.6 LOADING MECHANISM ASSY



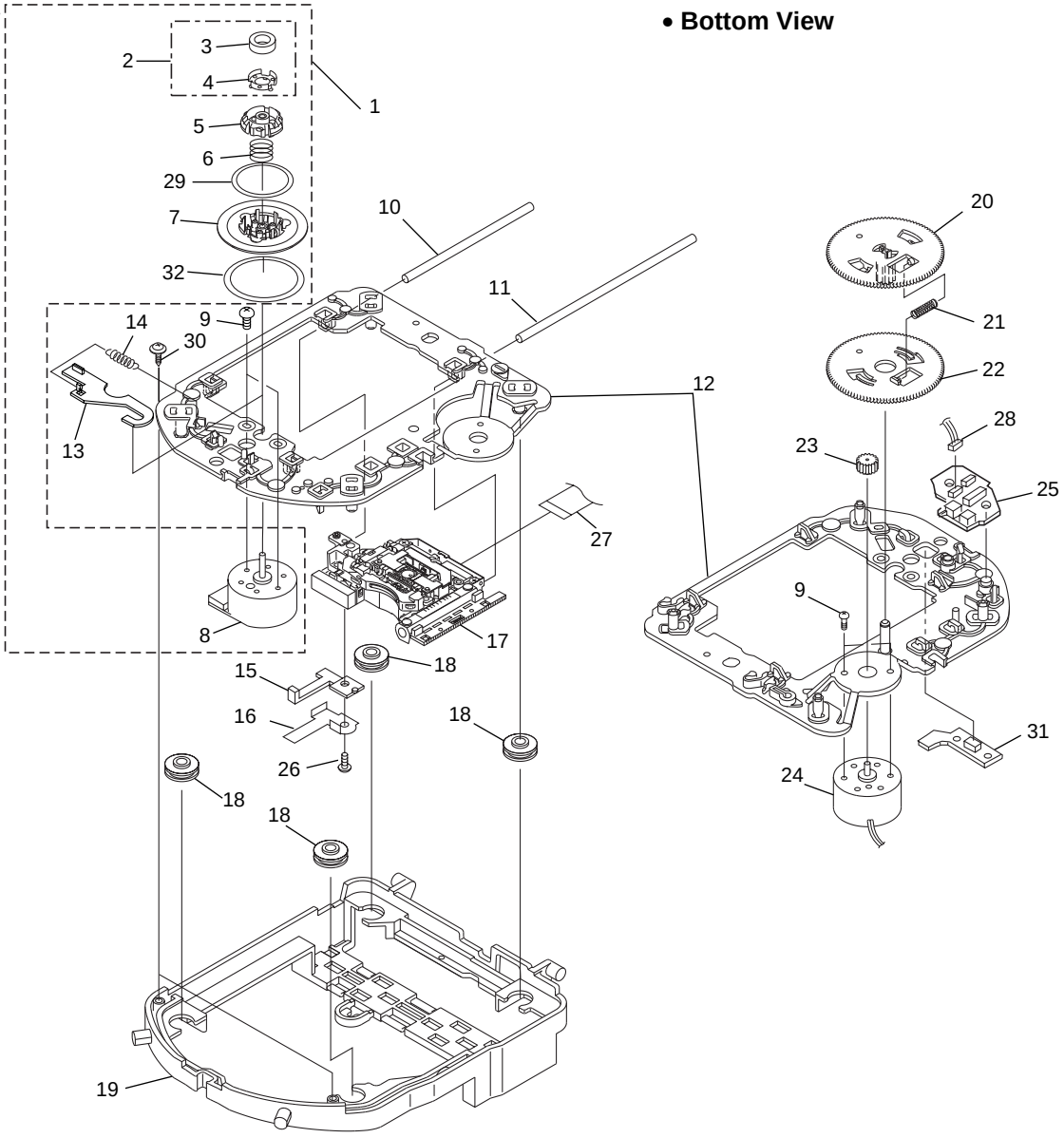
● LOADING MECHANISM ASSY PARTS LIST

Mark	No.	Description	Part No.
	1	Servo Mechanism Assy-S	VXX2538
	2	Screw	DBA1006
	3	Drive Cam	VNL1736
	4	Drive Gear	VNL1735
	5	Lock Plate	VNL1737
	6	Loading Base	VNK4245
	7	Rubber Belt	VEB1260
	8	Gear Pulley	VNL1733
NSP	9	LOSB Assy	VWG1885
	10	Loading Gear	VNL1734
	11	Loading Motor Assy	VXX2505
	12	DC Motor	PXM1027
	13	Motor Pulley	PNW1634
NSP	14	LOMB Assy	VWG1886
	15	Connector Assy (2P) (LOMB CN401 – LOSB CN303)	PG02KK-E35
	16	Screw	VBA1055
	17	Screw	Z39-019
	18	Flexible Cable (8P) (LOSB CN302 – INSB CN202)	VDA1649
	19	• • • • •	
	20	Stopper	DNH2076

2.7 SERVO MECHANISM ASSY

• **Top View**

• **Bottom View**



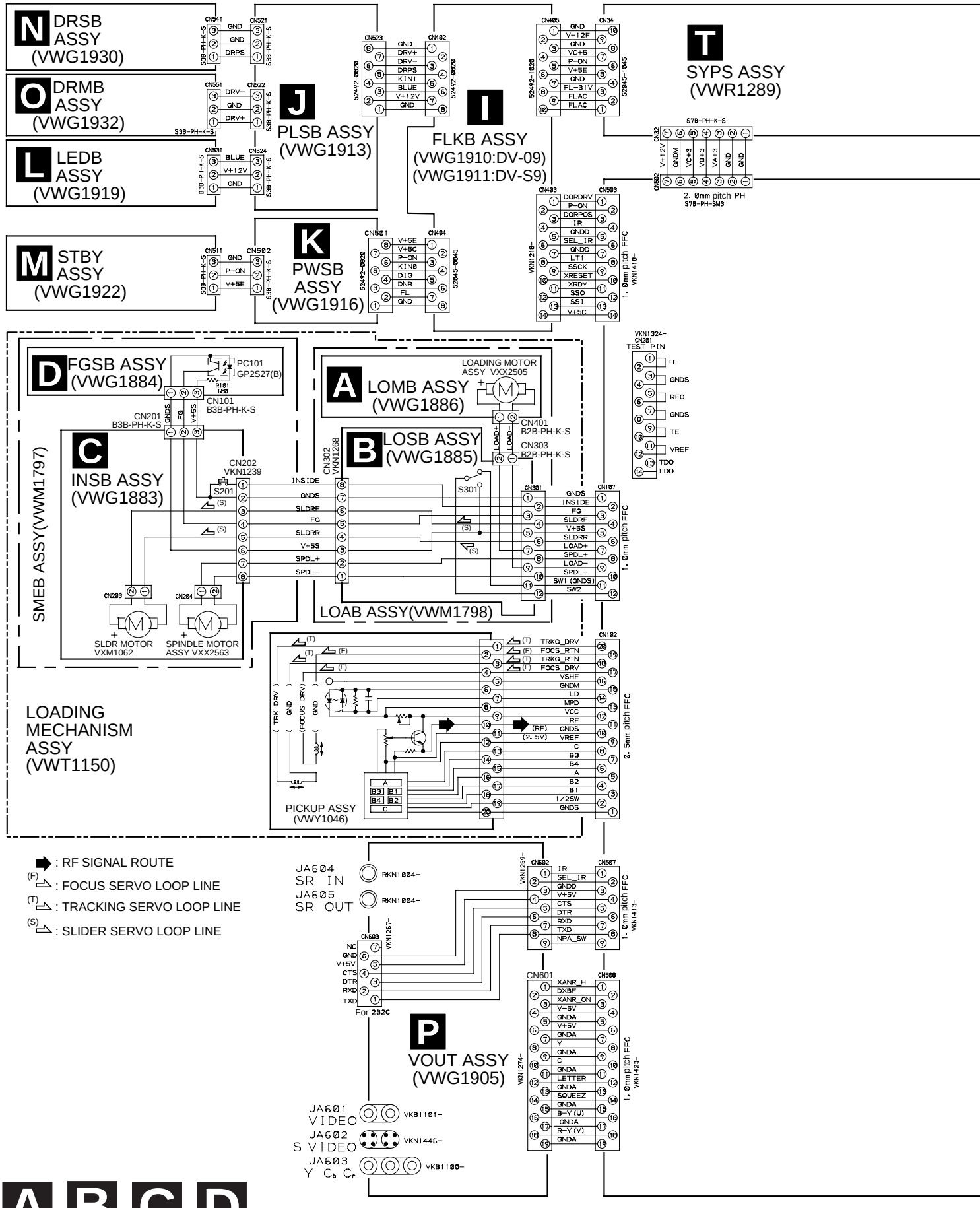
● SERVO MECHANISM ASSY PARTS LIST

Mark	No.	Description	Part No.
	1	Spindle Motor Assy	VXX2563
	2	Magnet Holder Assy	VXX2507
NSP	3	Magnet	VYM1024
NSP	4	Magnet Holder	VNE2070
	5	Centering Ring	VNL1746
	6	Centering Spring	VBH1278
NSP	7	Disc Table	VNL1747
NSP	8	Motor	VXM1071
	9	Screw	JGZ17P028FMC
	10	Sub Guide Bar	VLL1489
	11	Guide Bar	VLL1488
	12	Mechanism Base	VNL1748
	13	Hook	VNL1770
	14	Hook Spring	VBH1291
	15	Slider	VNL1745
	16	Hold Spring	VNC1011
NSP	17	Pickup Assy	VWY1046

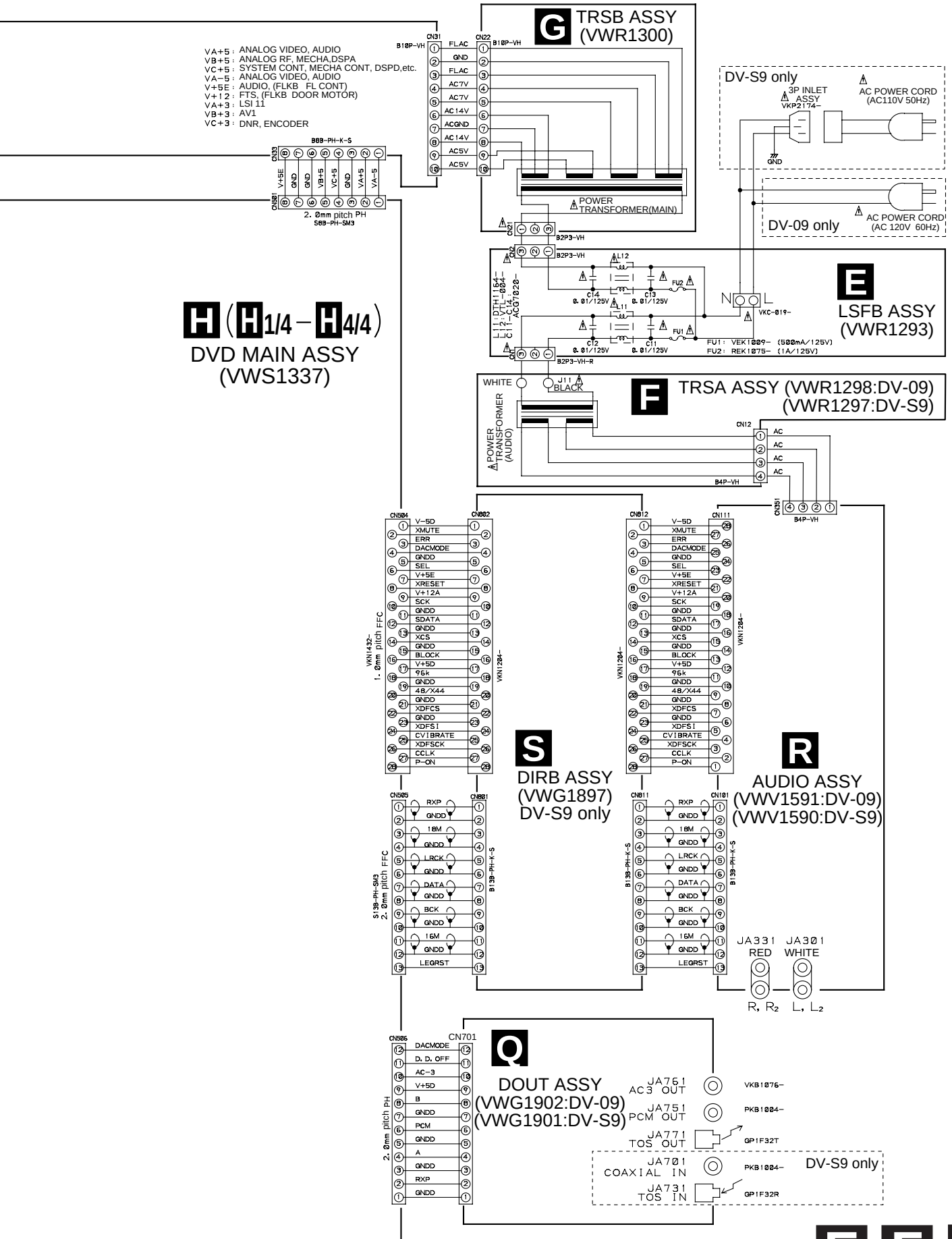
Mark	No.	Description	Part No.
	18	Floating Rubber	DEB1315
	19	Float Base	VNL1732
	20	Gear D	VNL1766
	21	Gear Spring	VBH1279
	22	Gear E	VNL1767
	23	Gear F	VNL1768
	24	Motor	VXM1062
NSP	25	INSB Assy	VWG1883
	26	Screw	PBZ20P050FMC
	27	Flexible Cable (20P) (DVD MAIN CN102 – Pickup Assy)	VDA1680
	28	Connector Assy (3P) (INSB CN201 – FGSB CN101)	VKP2150
NSP	29	Table Sheet	DEC2040
	30	Screw	PBA1048
NSP	31	FGSB Assy	VWG1884
NSP	32	Sheet	VEC1959

3. SCHEMATIC DIAGRAM

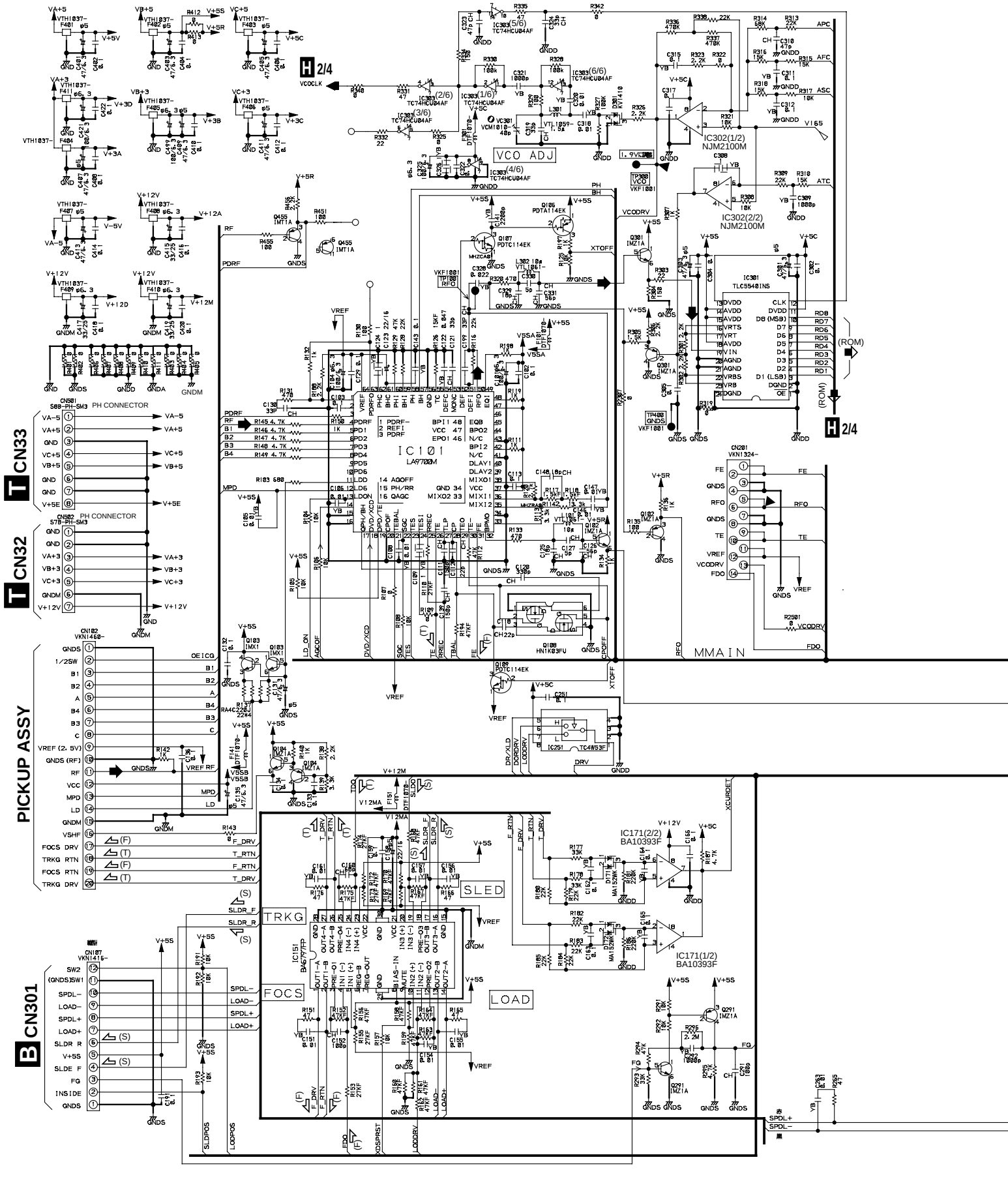
3.1 OVERALL CONNECTION DIAGRAM, LOMB, LOSB, INSB, FGSB, LSFB, TRSA and TRSB ASSEMBLIES



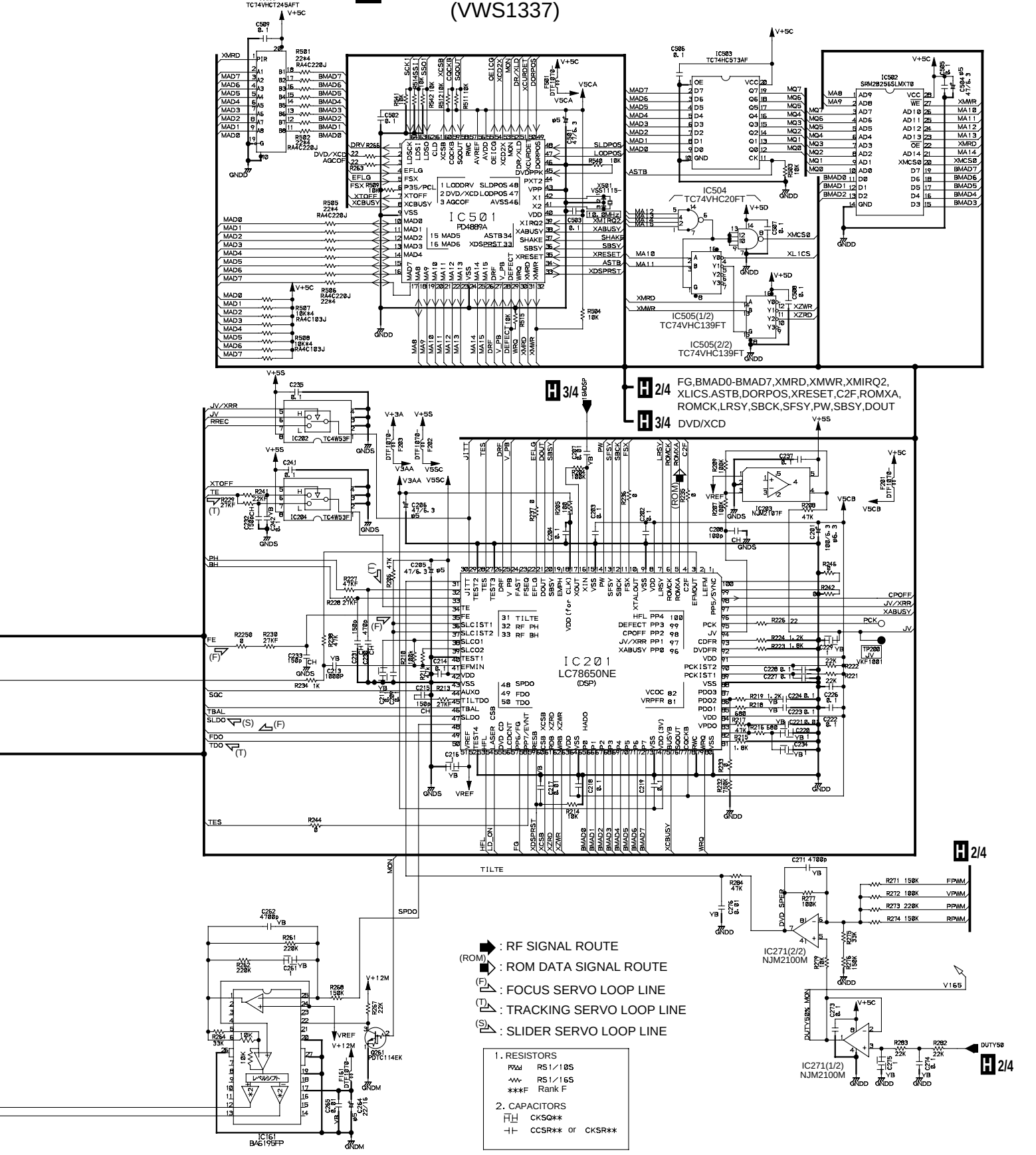
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"


VA+5 : ANALOG VIDEO, AUDIO
VB+5 : ANALOG RF, MECHA,DSPA
VC+5 : SYSTEM CONT, MECHA CONT, DSPD,etc.
VA-5 : ANALOG VIDEO, AUDIO
V+5E : AUDIO, (FLKB FL CONT)
V+12 : FTS, (FLKB DOOR MOTOR)
VA+3 : LSI 11
VB+3 : AV1
VC+3 : DNR, ENCODER
G TRSB ASSY (VWR1300)
H (H1/4 - H4/4)
DVD MAIN ASSY (VWS1337)
DV-S9 only
3P INLET ASSY VKP2174-
AC POWER CORD (AC110V 50Hz)
DV-09 only
AC POWER CORD (AC 120V 60Hz)
POWER TRANSFORMER(MAIN)
E LSFB ASSY (VWR1293)
F TRSA ASSY (VWR1298:DV-09) (VWR1297:DV-S9)
POWER TRANSFORMER (AUDIO)
S DIRB ASSY (VWG1897) DV-S9 only
R AUDIO ASSY (VWV1591:DV-09) (VWV1590:DV-S9)
Q DOUT ASSY (VWG1902:DV-09) (VWG1901:DV-S9)
JA331 RED
JA301 WHITE
R, R2 L, L2
JA761 AC3 OUT
JA751 PCM OUT
JA771 TOS OUT
JA701 COAXIAL IN
JA731 TOS IN
DV-S9 only

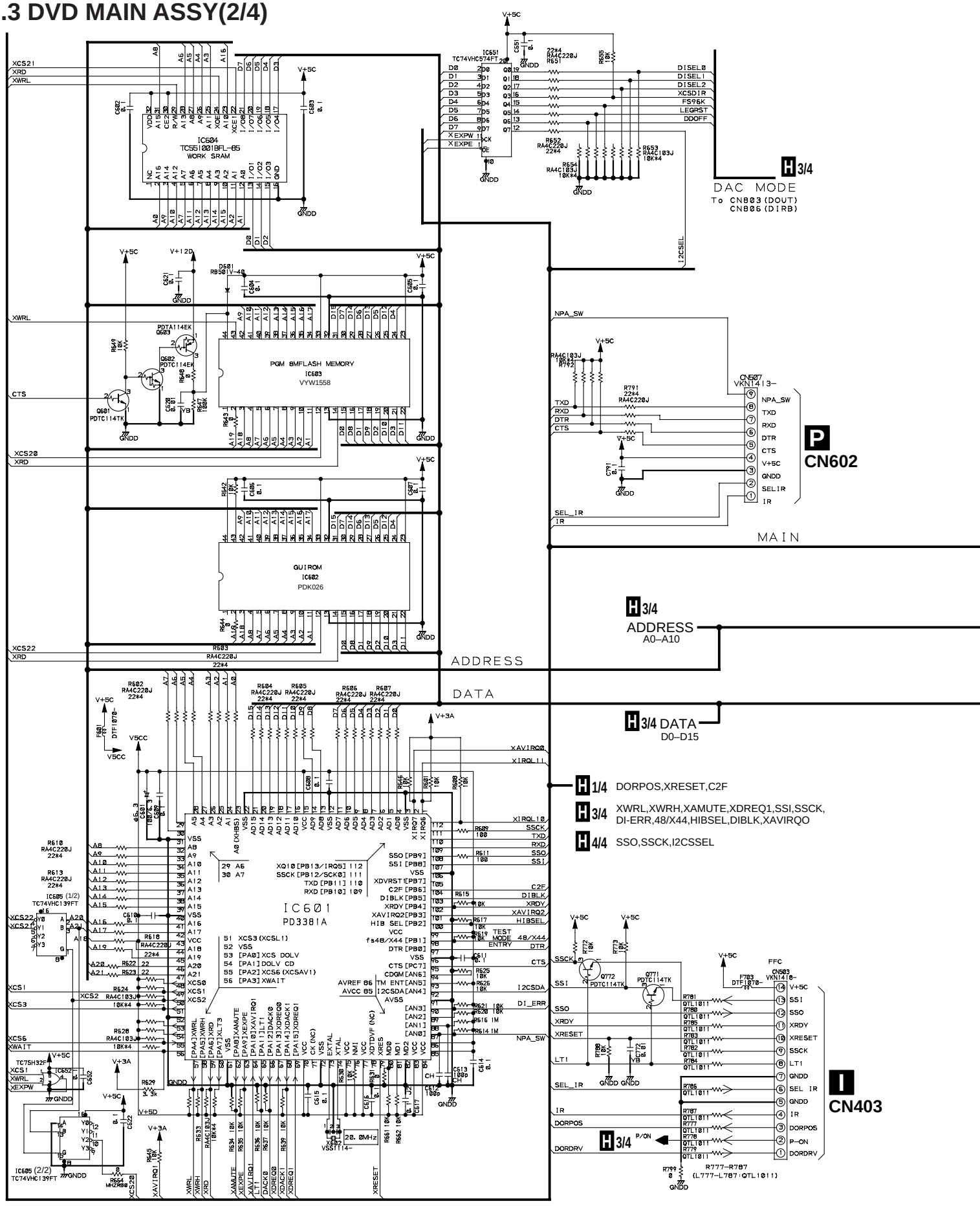
3.2 DVD MAIN ASSY(1/4)



H1/4 DVD MAIN ASSY (VWS1337)



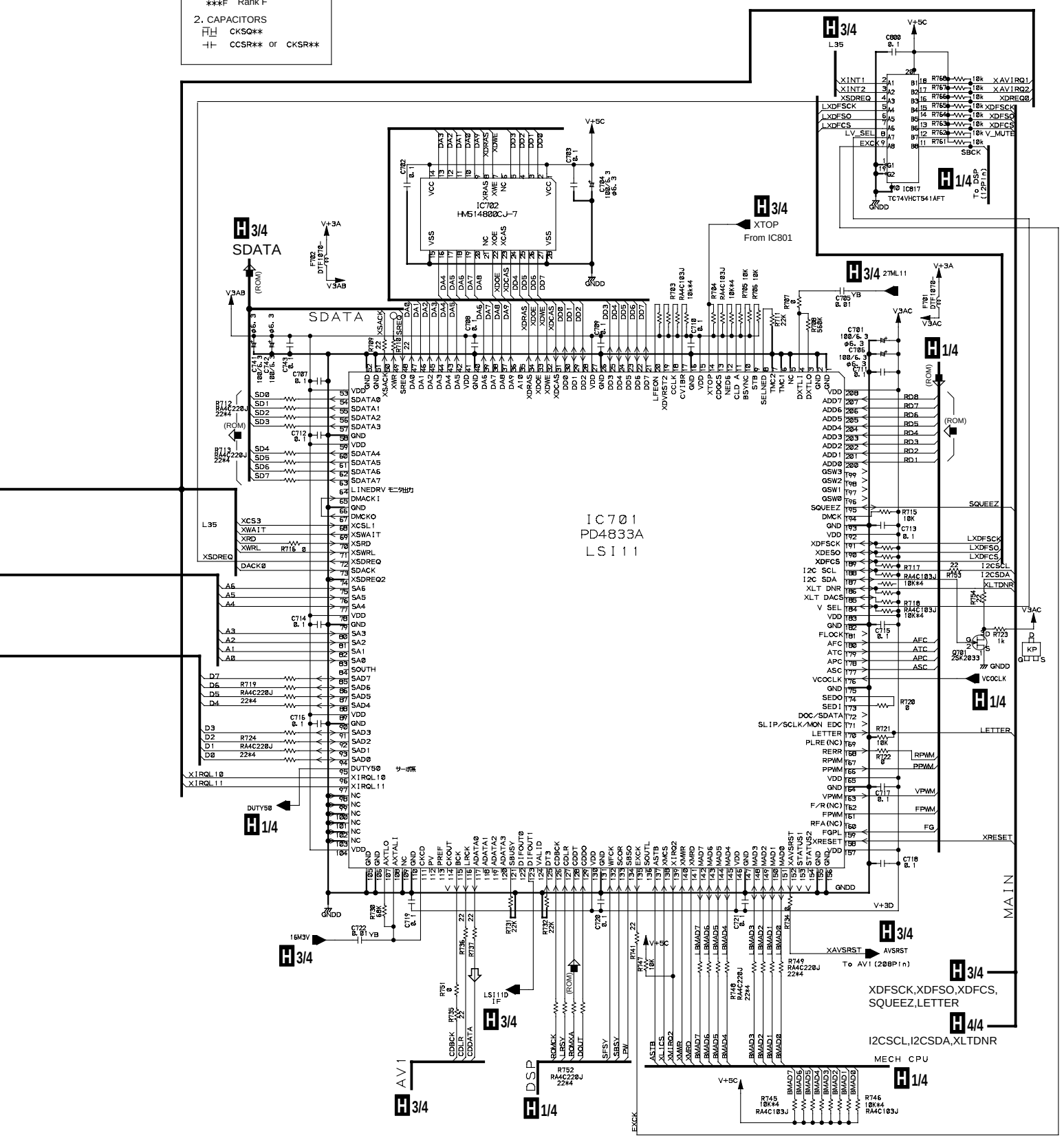
3.3 DVD MAIN ASSY(2/4)



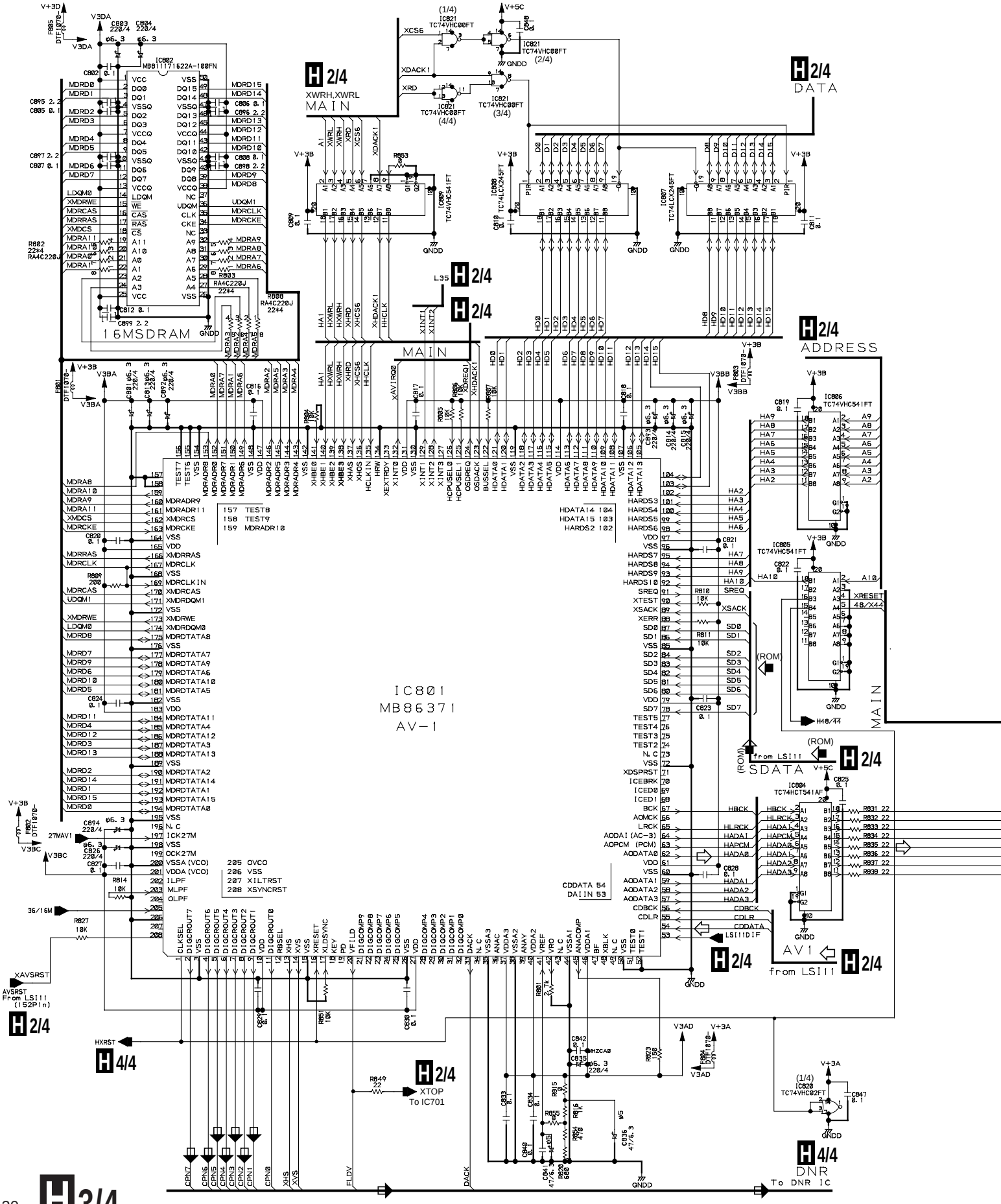
H2/4 DVD MAIN ASSY (VWS1337)

1. RESISTORS
   RS1/10S
   RS1/16S
   Rank F
2. CAPACITORS
   CKSQ**
   CCSR** or CKSR**

: AUDIO SIGNAL ROUTE
(ROM) : ROM DATA SIGNAL ROUTE

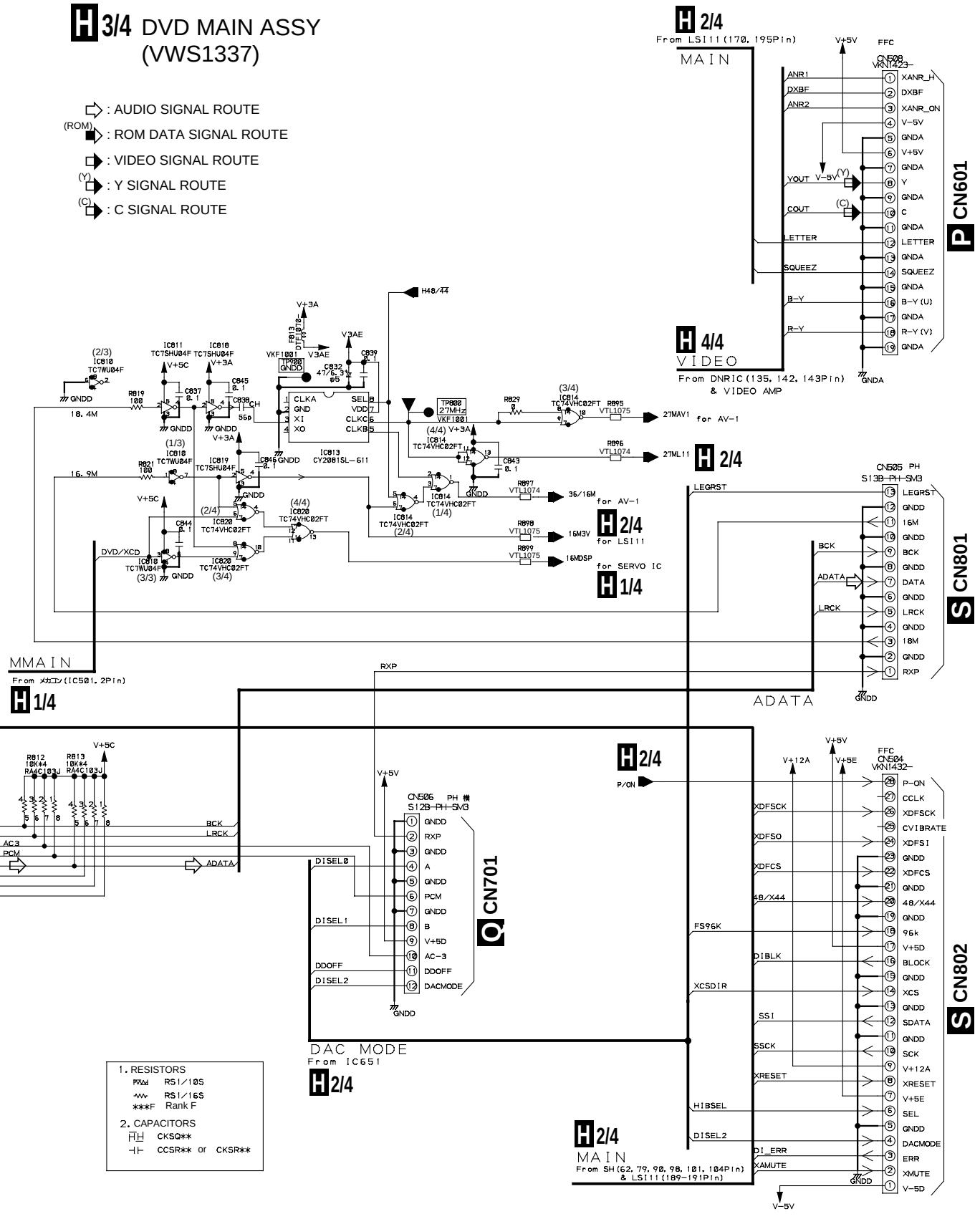


3.4 DVD MAIN ASSY(3/4)



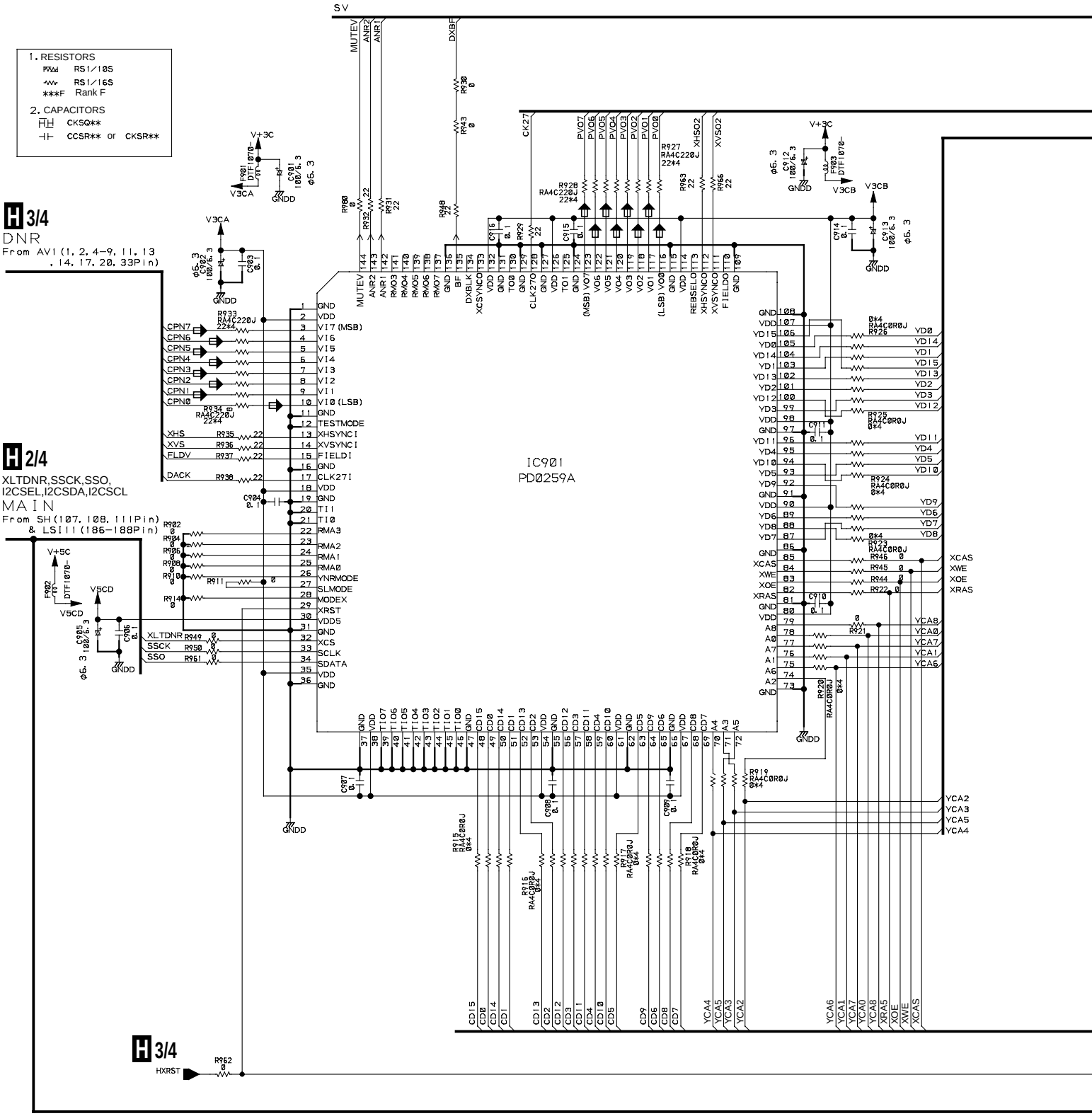
H 3/4 DVD MAIN ASSY (VWS1337)

: AUDIO SIGNAL ROUTE
(ROM) : ROM DATA SIGNAL ROUTE
: VIDEO SIGNAL ROUTE
(Y) : Y SIGNAL ROUTE
(C) : C SIGNAL ROUTE



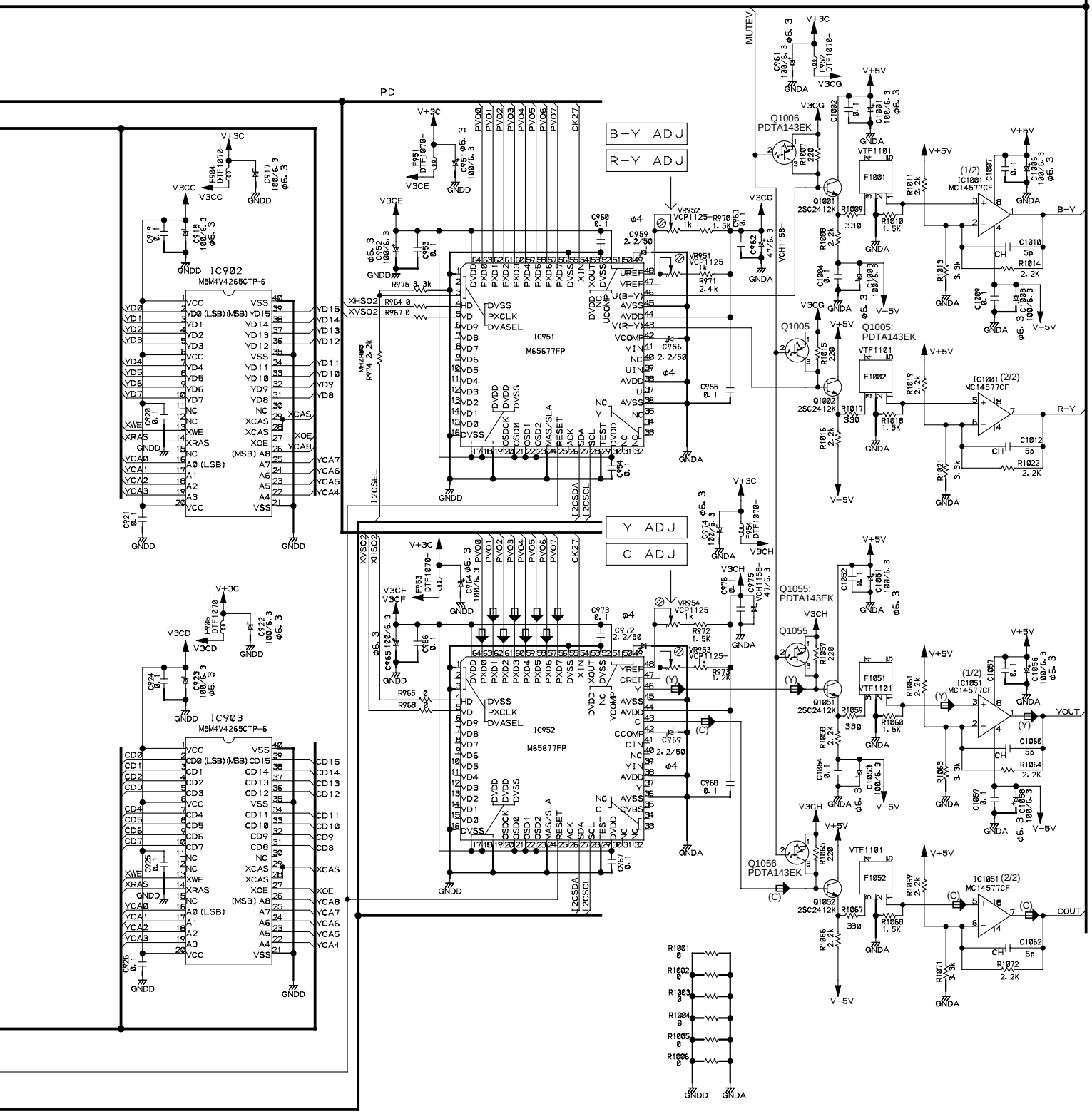
3.5 DVD MAIN ASSY(4/4)

H 4/4 DVD MAIN ASSY (VWS1337)

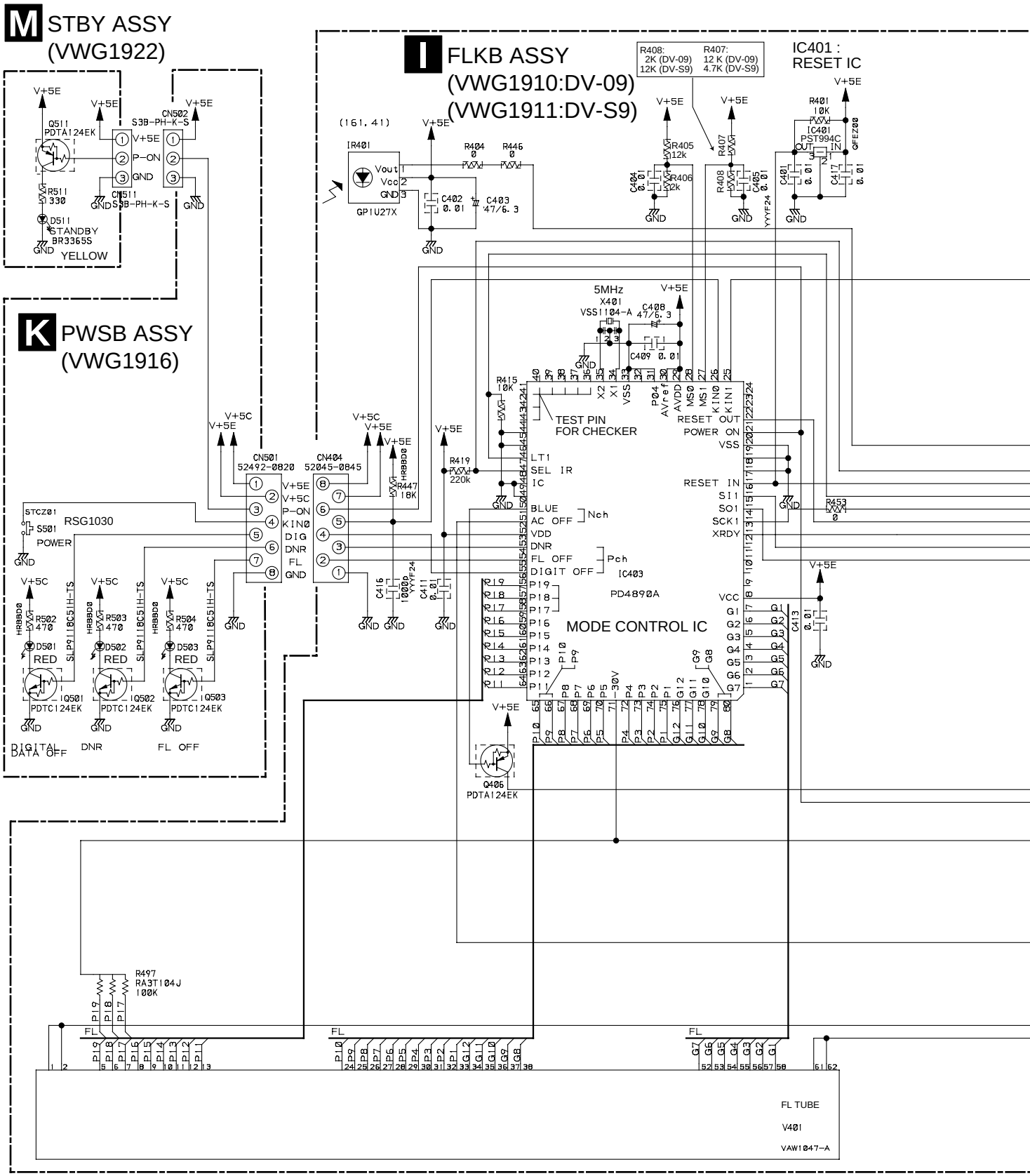


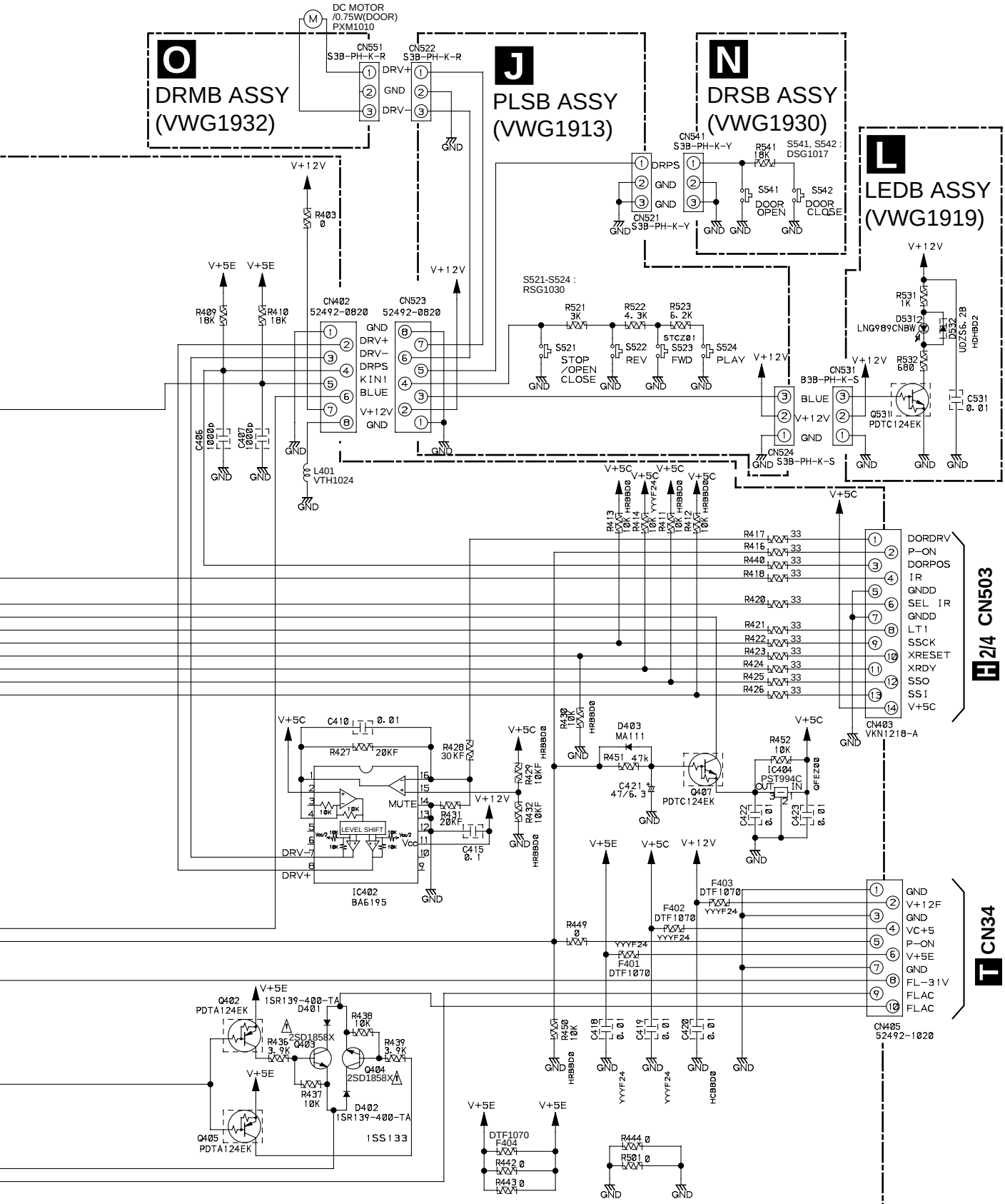
: VIDEO SIGNAL ROUTE
(Y): Y SIGNAL ROUTE
(C): C SIGNAL ROUTE

H 3/4
VIDEO
To CN802 (VOUT)



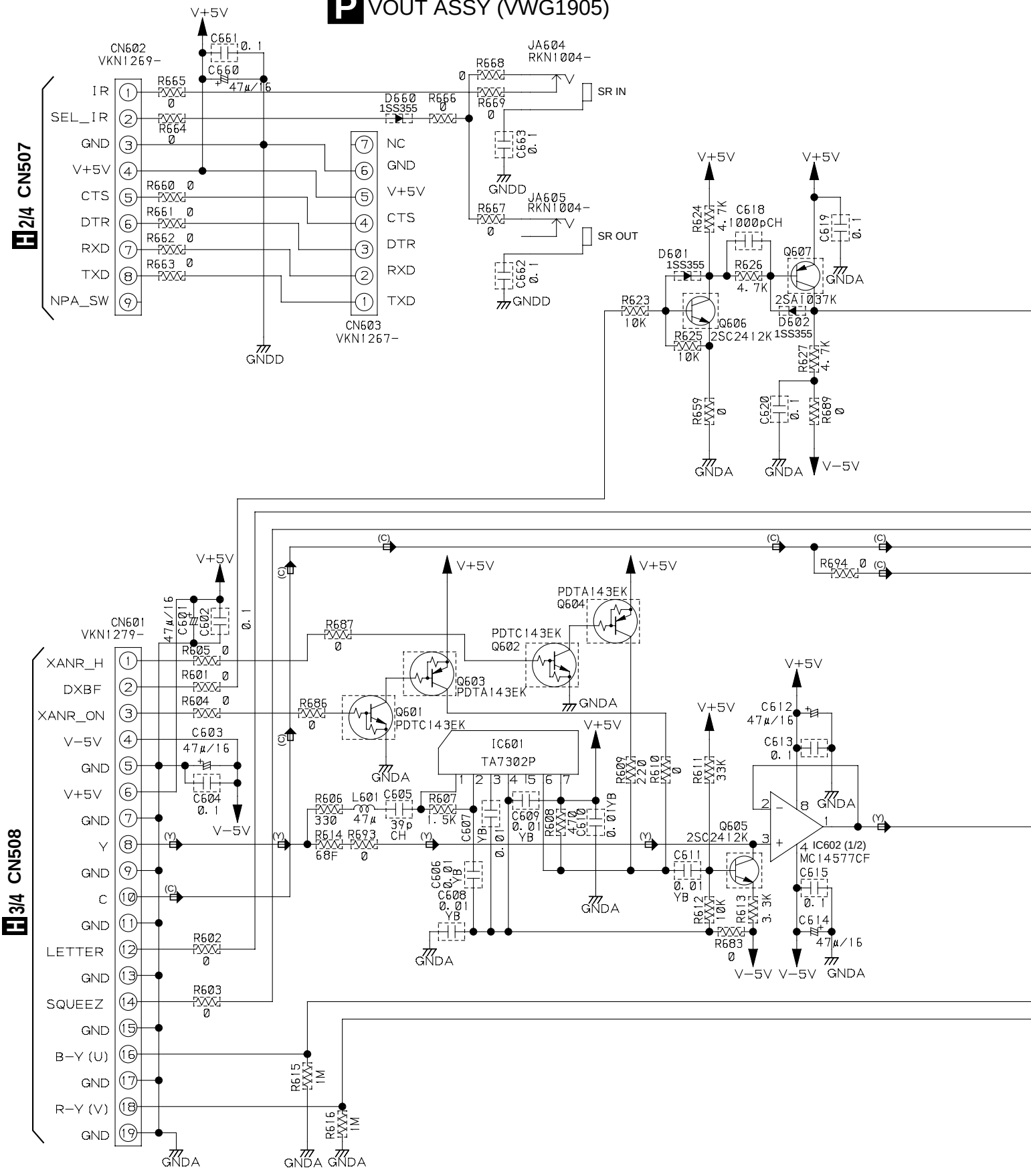
3.6 FLKB, PLSB, PWSB, LEDB, STBY, DRSB and DRMB ASSEMBLIES

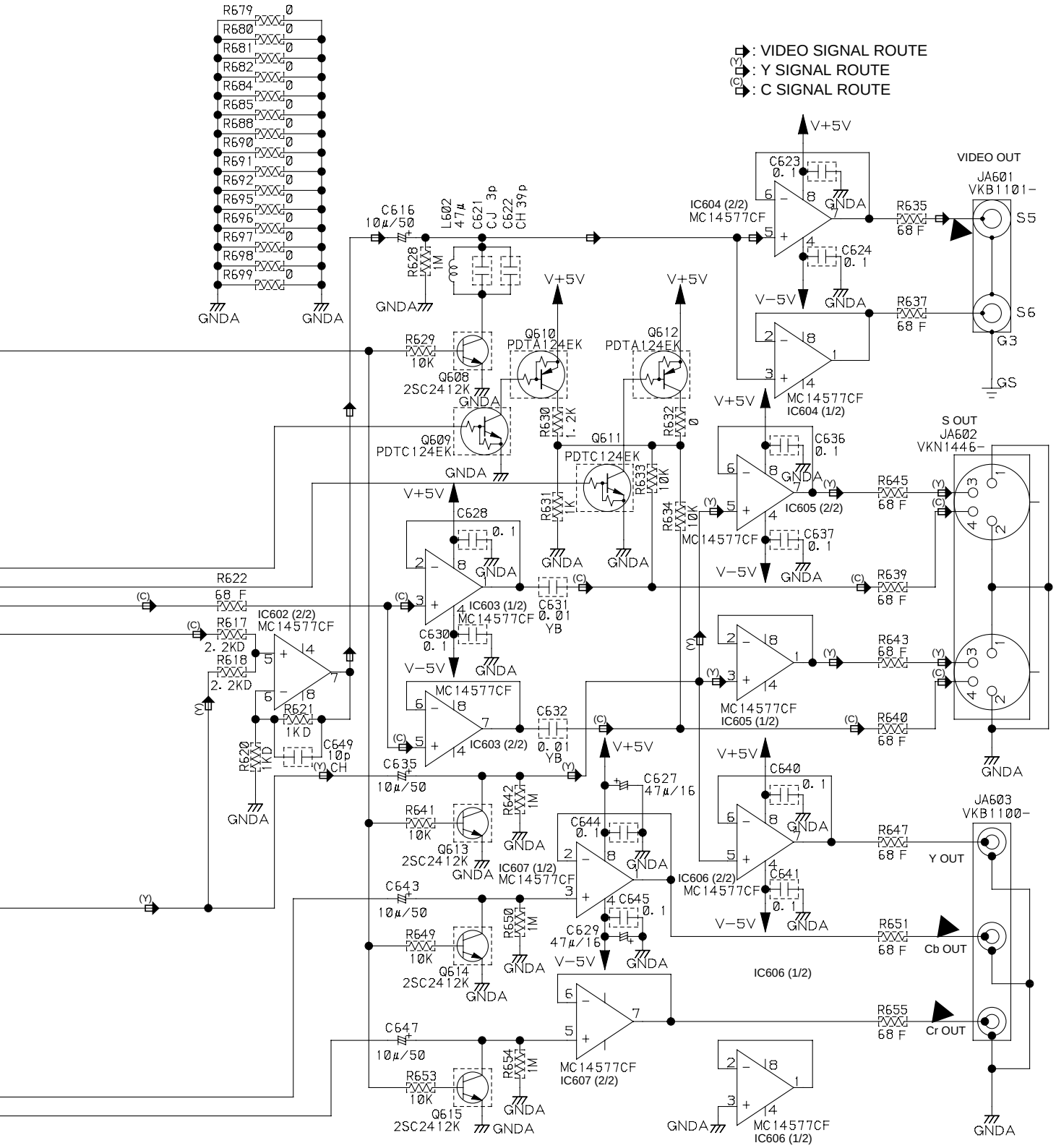



O
DRMB ASSY
(VWG1932)
J
PLSB ASSY
(VWG1913)
N
DRSB ASSY
(VWG1930)
L
LEDB ASSY
(VWG1919)
DC MOTOR
/0.75W(DOOR)
PXM1010
CN551
S3B-PH-K-R
CN522
S3B-PH-K-R
DRV+
GND
DRV−
CN541
S3B-PH-K-Y
DRPS
CN521
S3B-PH-K-Y
R541
18K
S541, S542 :
DSG1017
S541
DOOR
OPEN
S542
DOOR
CLOSE
V+12V
R403
0
V+5E
R409
18K
R410
18K
CN402
52492-0820
CN523
52492-0820
GND
DRV+
DRV−
DRPS
KIN1
BLUE
V+12V
S521-S524 :
RSG1030
R521
3K
R522
4. 3K
R523
6. 2K
S521
STOP
/OPEN
CLOSE
S522
REV
S523
FWD
S524
PLAY
CN524
S3B-PH-K-S
CN531
B3B-PH-K-S
R531
1K
D531
LNG989CNBW
R532
680
Q531
PDTC124EK
C531
0. 01
C405
1000p
C407
1000p
L401
VTH1024
V+5C
R413
10K
R414
10K
R411
10K
R412
10K
HRBBD0
YYYF24
HCBBD0
R417
R416
R440
R418
R420
R421
R422
R423
R424
R425
R426
33
CN503
H 2/4
DORDRV
P−ON
DORPOS
IR
GNDD
SEL IR
GNDD
LT1
SSCK
XRESET
XRDY
SSO
SSI
V+5C
CN403
VKN1218-A
C410
0. 01
R427
20KF
R428
30KF
R429
10KF
R430
10K
R431
20KF
R432
10KF
C415
0. 1
MUTE
LEVEL SHIFT
DRV−
DRV+
IC402
BA6195
D403
MA111
R451
47k
C421
47/6. 3
Q407
PDTC124EK
R452
10K
IC404
PST994C
OUT
IN
QFEZ00
C422
0. 01
C423
0. 01
F403
DTF1070
F402
DTF1070
F401
DTF1070
YYYF24
R449
0
CN405
52492-1020
T CN34
GND
V+12F
VC+5
P−ON
V+5E
FL−31V
FLAC
R450
10K
C418
0. 01
C419
0. 01
C420
0. 01
Q402
PDTA124EK
Q403
2SD1858X
Q404
2SD1858X
Q405
PDTA124EK
D401
1SR139-400-TA
D402
1SR139-400-TA
1SS133
R436
3. 9K
R437
10K
R438
10K
R439
3. 9K
DTF1070
F404
R442
R443
R444
R501
PWSB ASSY
S501:POWER
STANDBY/ON
PLSB ASSY
S521: ■/▲
S522: I◀◀
S523: ▶▶I
S524: ▶/II

3.7 VOUT ASSY

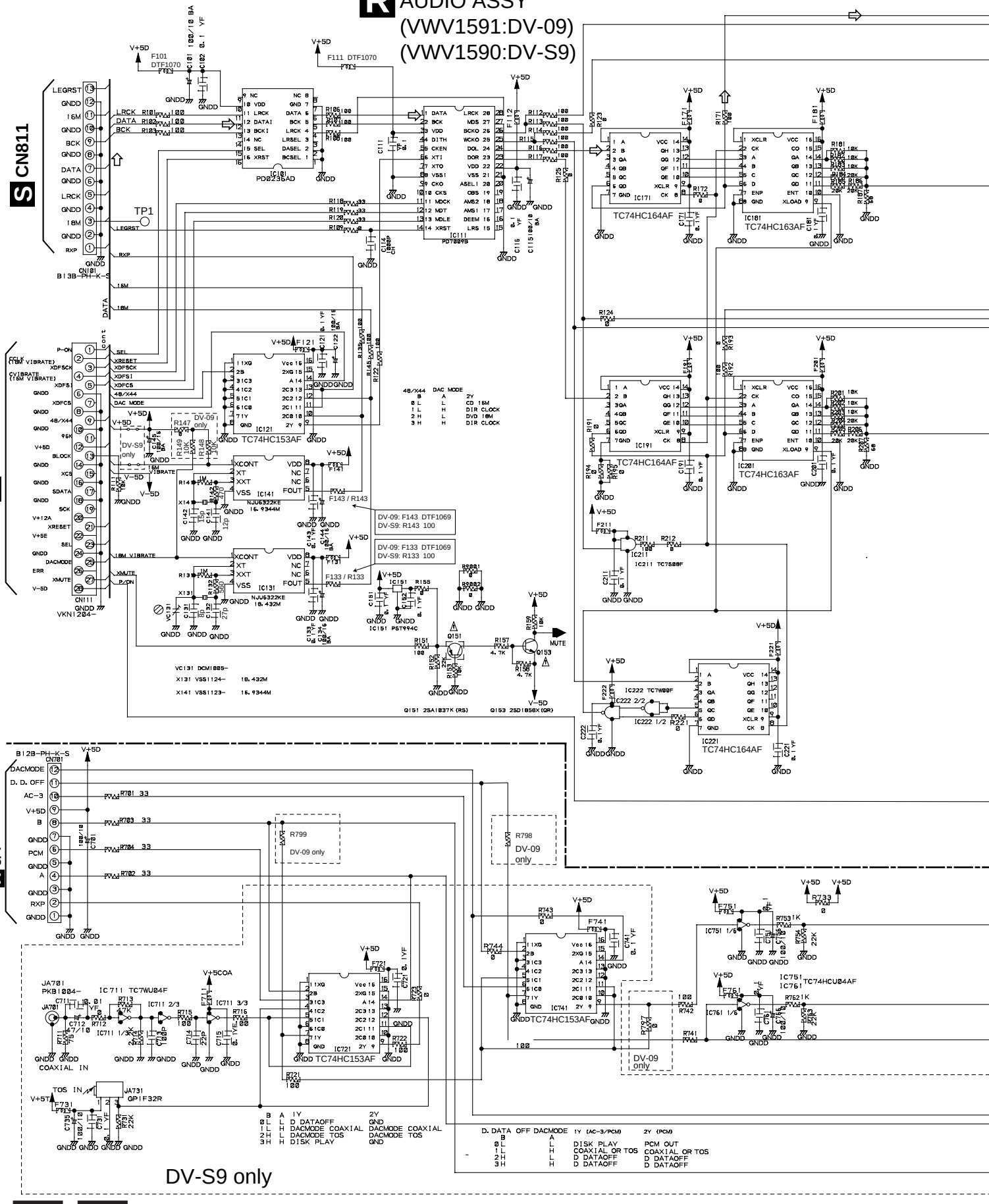
P VOUT ASSY (VWG1905)

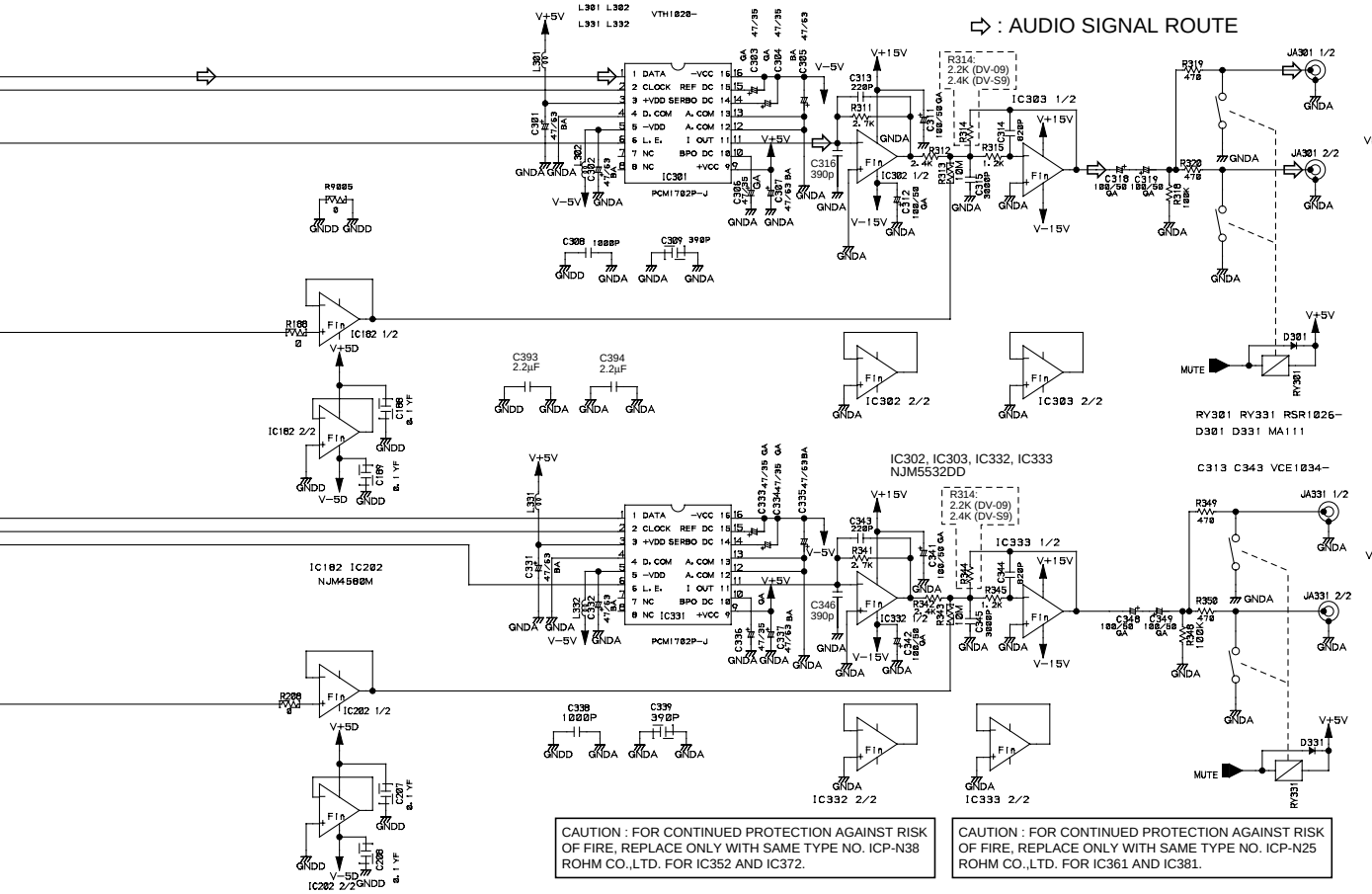


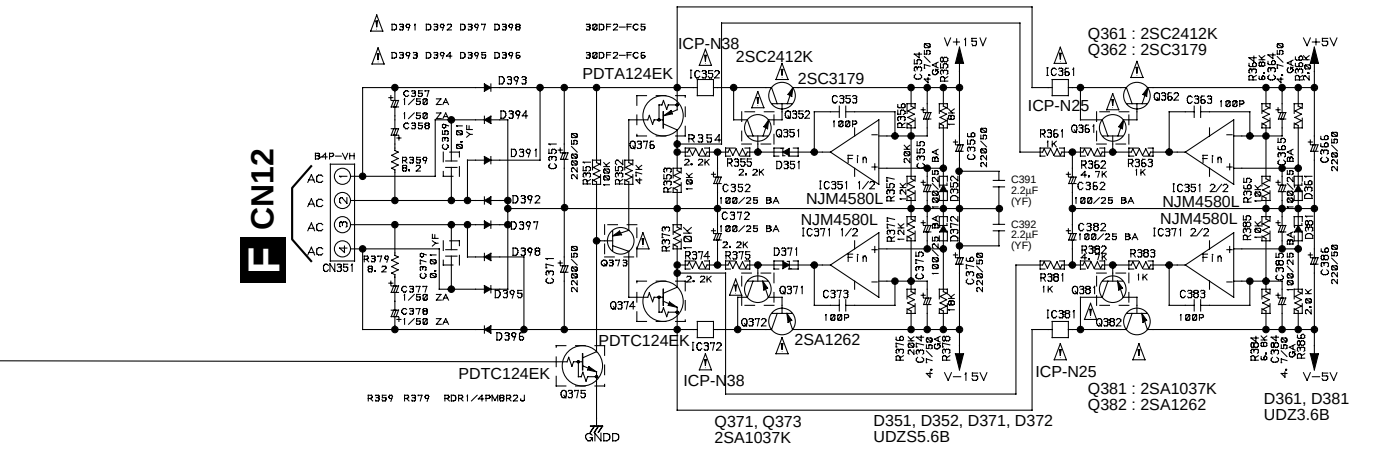

: VIDEO SIGNAL ROUTE
(Y): Y SIGNAL ROUTE
(C): C SIGNAL ROUTE
V+5V
V-5V
GNDA
VIDEO OUT
JA601
VKB1101-
S5
S6
G3
GS
S OUT
JA602
VKN1446-
JA603
VKB1100-
Y OUT
Cb OUT
Cr OUT
IC602 (2/2) MC14577CF
IC603 (1/2) MC14577CF
IC603 (2/2) MC14577CF
IC604 (2/2) MC14577CF
IC604 (1/2) MC14577CF
IC605 (2/2) MC14577CF
IC605 (1/2) MC14577CF
IC606 (2/2) MC14577CF
IC606 (1/2) MC14577CF
IC607 (1/2) MC14577CF
IC607 (2/2) MC14577CF
Q608 2SC2412K
Q609 PDTC124EK
Q610 PDTA124EK
Q611 PDTC124EK
Q612 PDTA124EK
Q613 2SC2412K
Q614 2SC2412K
Q615 2SC2412K
R679 0
R680 0
R681 0
R682 0
R684 0
R685 0
R688 0
R690 0
R691 0
R692 0
R695 0
R696 0
R697 0
R698 0
R699 0
R622 68 F
R617 2.2KD
R618 2.2KD
R621 1KD
R620 1KD
R628 1M
R629 10K
R630 1.2K
R631 1K
R632 0
R633 10K
R634 10K
R635 68 F
R637 68 F
R639 68 F
R640 68 F
R641 10K
R642 1M
R643 68 F
R645 68 F
R647 68 F
R649 10K
R650 1M
R651 68 F
R653 10K
R654 1M
R655 68 F
C616 10μ/50
L602 47μ
C621 CJ 3p
C622 CH 39p
C623 0.1
C624 0.1
C627 47μ/16
C628 0.1
C629 47μ/16
C630 0.1
C631 0.01 YB
C632 0.01 YB
C635 10μ/50
C636 0.1
C637 0.1
C640 0.1
C641 0.1
C643 10μ/50
C644 0.1
C645 0.1
C647 10μ/50
C649 10p CH

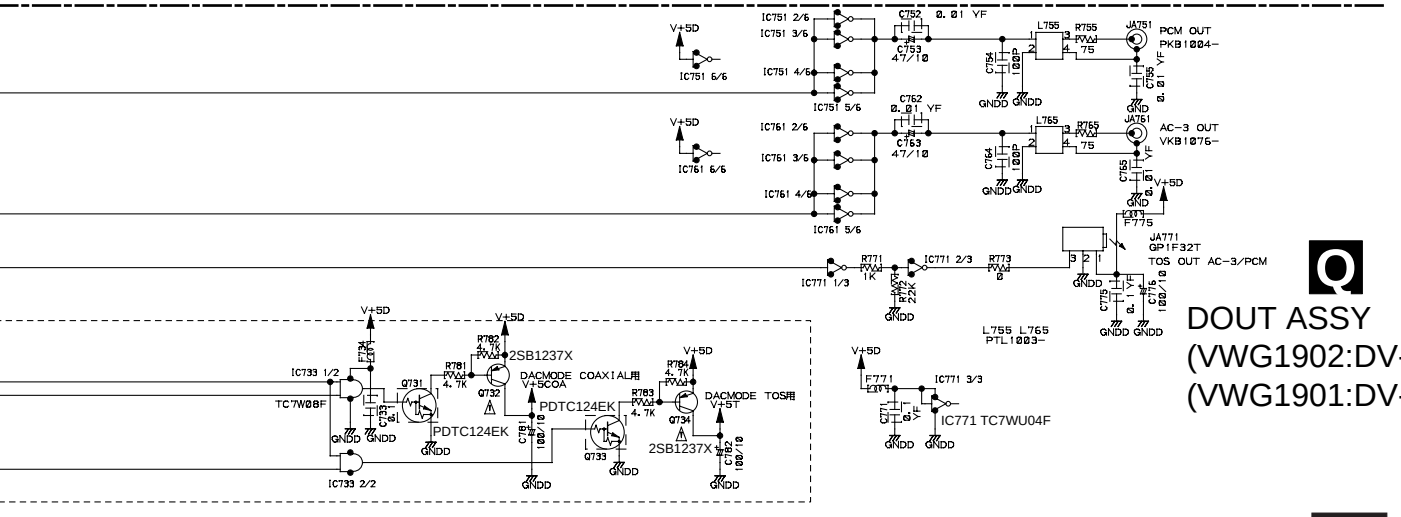
3.8 DOUT and AUDIO ASSEMBLIES

R AUDIO ASSY
(VWV1591:DV-09)
(VWV1590:DV-S9)



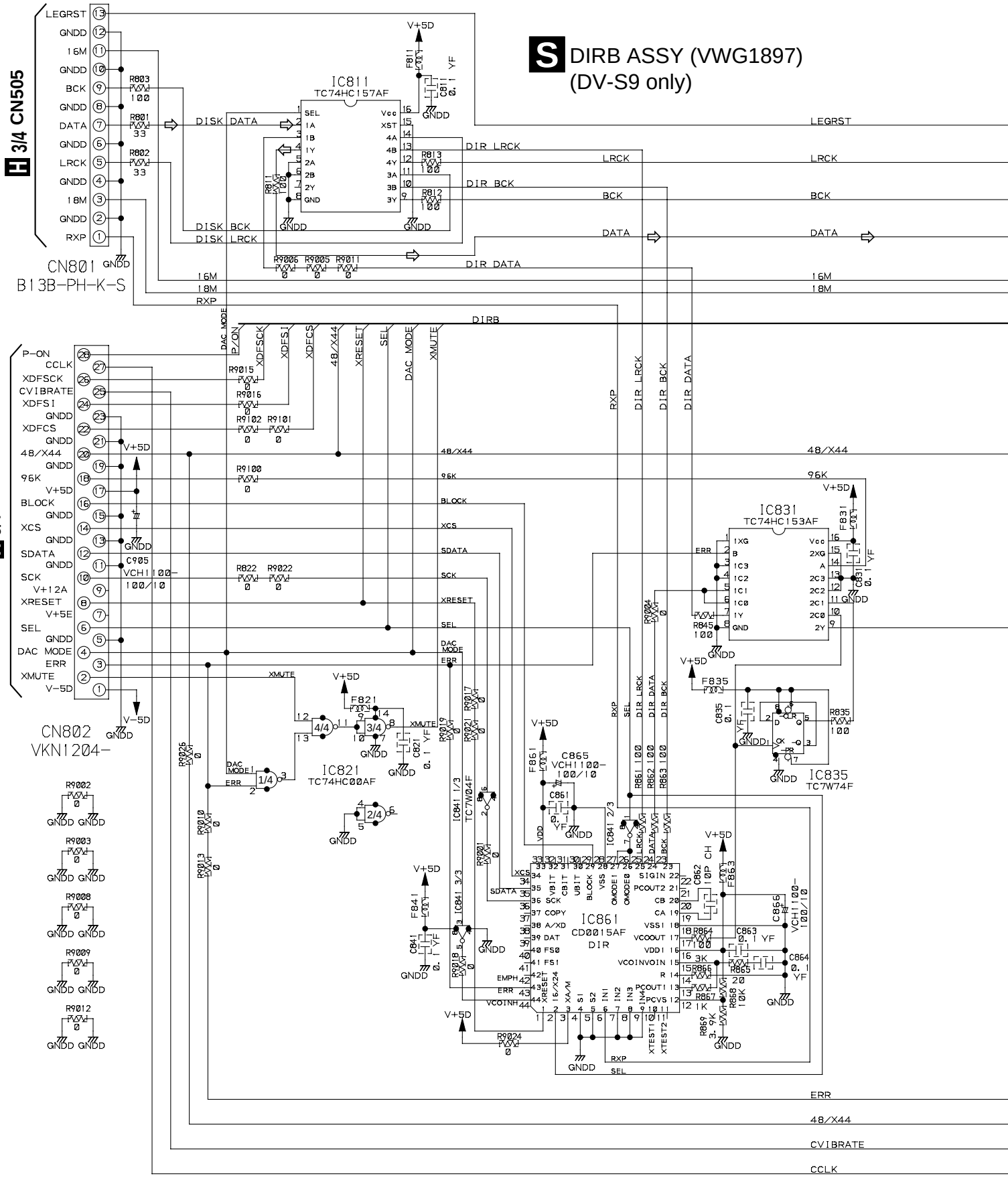

⇨ : AUDIO SIGNAL ROUTE
IC302, IC303, IC332, IC333
NJM5532DD
IC182 IC202
NJM4580M
R314:
2.2K (DV-09)
2.4K (DV-S9)
VKB1103-
VKB1104-
RY301 RY331 RSR1026-
D301 D331 MA111
C313 C343 VCE1034-
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. ICP-N38 ROHM CO.,LTD. FOR IC352 AND IC372.
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. ICP-N25 ROHM CO.,LTD. FOR IC361 AND IC381.

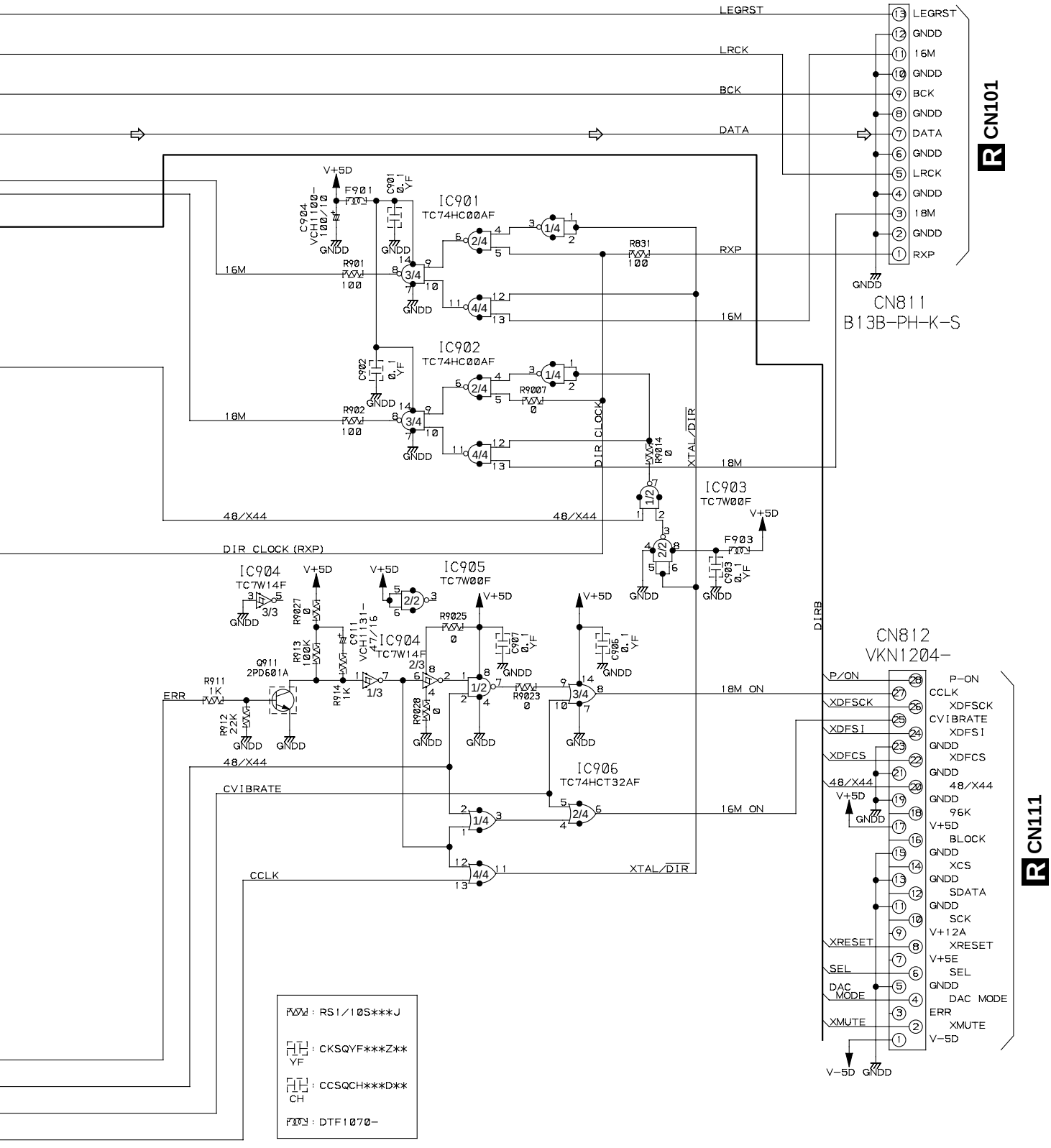




DOUT ASSY
(VWG1902:DV-09)
(VWG1901:DV-S9)

3.9 DIRB ASSY


S DIRB ASSY (VWG1897)
(DV-S9 only)
H 3/4 CN505
CN801
B13B-PH-K-S
H 3/4 CN504
CN802
VKN1204-
IC811
TC74HC157AF
IC831
TC74HC153AF
IC821
TC74HC00AF
IC835
TC7W74F
IC861
CD00015AF
DIR
DISK DATA
DISK BCK
DISK LRCK
DIR LRCK
DIR BCK
DIR DATA
LEGRST
LRCK
BCK
DATA
16M
18M
RXP
DIRB
48/X44
96K
BLOCK
XCS
SDATA
SCK
XRESET
SEL
DAC MODE
ERR
XMUTE
CVIBRATE
CCLK
V+5D
V-5D
GNDD


⇨ : AUDIO SIGNAL ROUTE
LEGRST
LRCK
BCK
DATA
CN101
CN811
B13B-PH-K-S
IC901
TC74HC00AF
IC902
TC74HC00AF
IC903
TC7W00F
IC904
TC7W14F
IC905
TC7W00F
IC906
TC74HCT32AF
16M
18M
48/X44
DIR CLOCK (RXP)
DIR CLOCK
XTAL/DIR
RXP
18M ON
16M ON
CVIBRATE
CCLK
ERR
CN812
VKN1204-
CN111
V+5D
GNDD
V-5D
F901
F903
R901
R902
R831
R9007
R9014
R9025
R9027
R9028
R9023
R911
R912
R913
R914
Q911
2PD601A
C901
C902
C903
C904
C905
C906
C907
C911
P-ON
CCLK
XDFSCK
CVIBRATE
XDFSI
XDFCS
48/X44
96K
BLOCK
XCS
SDATA
SCK
V+12A
XRESET
V+5E
SEL
DAC MODE
XMUTE
V-5D
R : RS1/10S***J
CK : CKSQYF***Z**
YF
CH : CCSQCH***D**
DTF : DTF1070-

3.10 SYPS ASSY

● **NOTE FOR FUSE REPLACEMENT**

● **CAUTION :** FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,REPLACE WITH SAME TYPE AND RATINGS ONLY.

T SYPS ASSY (VWR1289)

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491.750, MFD BY LITTELFUSE INC. FOR IC101.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491.400, MFD BY LITTELFUSE INC. FOR IC102, IC201 AND IC203.

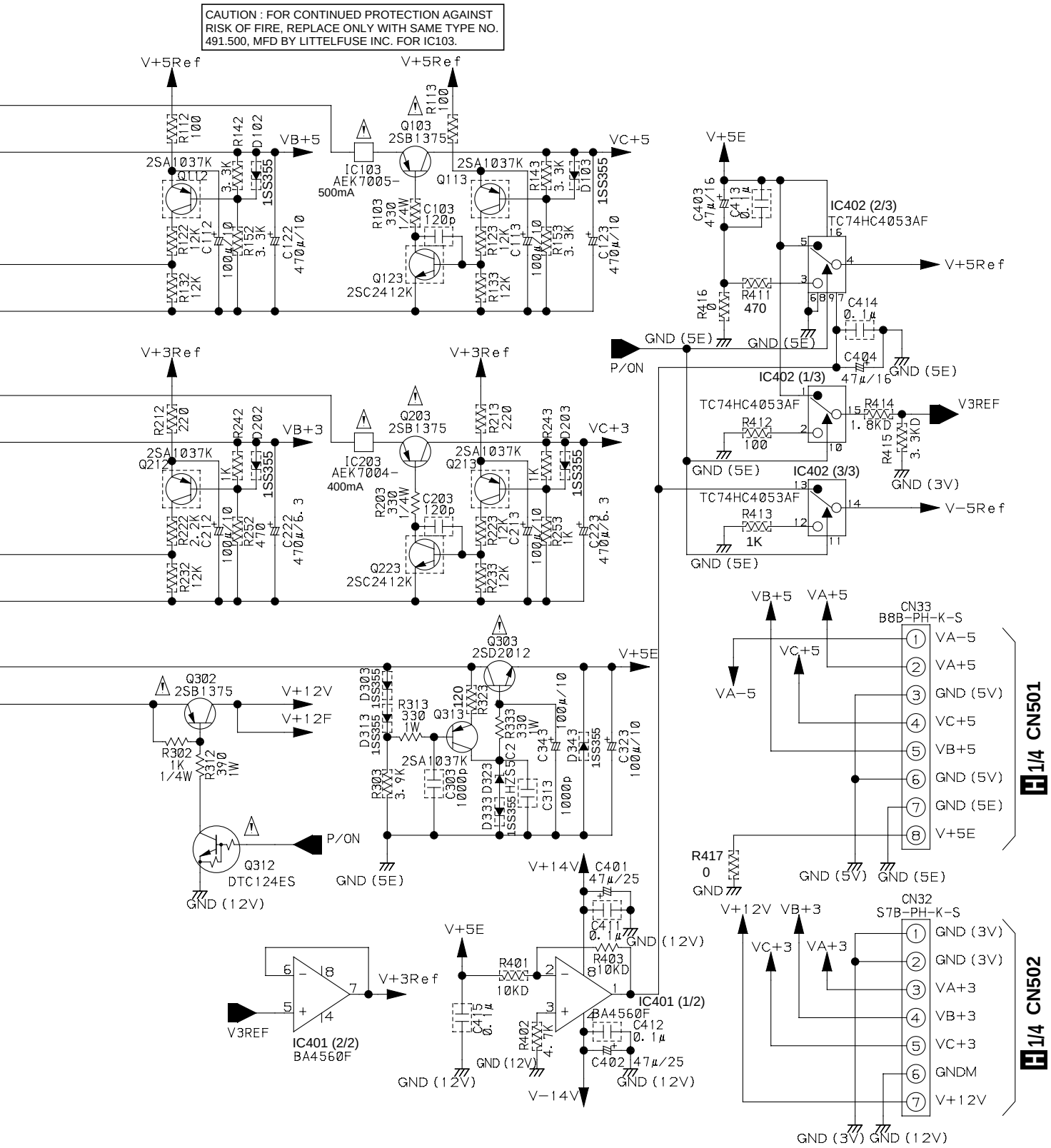
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 4911.25, MFD BY LITTELFUSE INC. FOR IC202.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491.250, MFD BY LITTELFUSE INC. FOR IC303. .

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491.800, MFD BY LITTELFUSE INC. FOR IC301 AND IC302.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491.200, MFD BY LITTELFUSE INC. FOR IC314 AND IC324.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491.125, MFD BY LITTELFUSE INC. FOR IC304.


CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE NO. 491.500, MFD BY LITTELFUSE INC. FOR IC103.
V+5Ref
V+5Ref
VB+5
VC+5
Q103 2SB1375
Q113
2SA1037K
IC103 AEK7005- 500mA
Q123 2SC2412K
V+3Ref
V+3Ref
VB+3
VC+3
Q203 2SB1375
Q213
IC203 AEK7004- 400mA
Q223 2SC2412K
V+5E
IC402 (2/3) TC74HC4053AF
IC402 (1/3) TC74HC4053AF
IC402 (3/3) TC74HC4053AF
V3REF
V-5Ref
GND (5E)
GND (3V)
P/ON
Q303 2SD2012
Q302 2SB1375
V+12V
V+12F
Q312 DTC124ES
GND (12V)
V+14V
V-14V
IC401 (2/2) BA4560F
IC401 (1/2) BA4560F
V+3Ref
V3REF
CN33 B8B-PH-K-S
VA-5
VA+5
GND (5V)
VC+5
VB+5
GND (5V)
GND (5E)
V+5E
1/4 CN501
CN32 S7B-PH-K-S
GND (3V)
GND (3V)
VA+3
VB+3
VC+3
GNDM
V+12V
GND (3V) GND (12V)
1/4 CN502

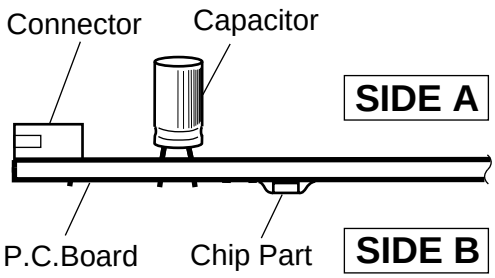
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

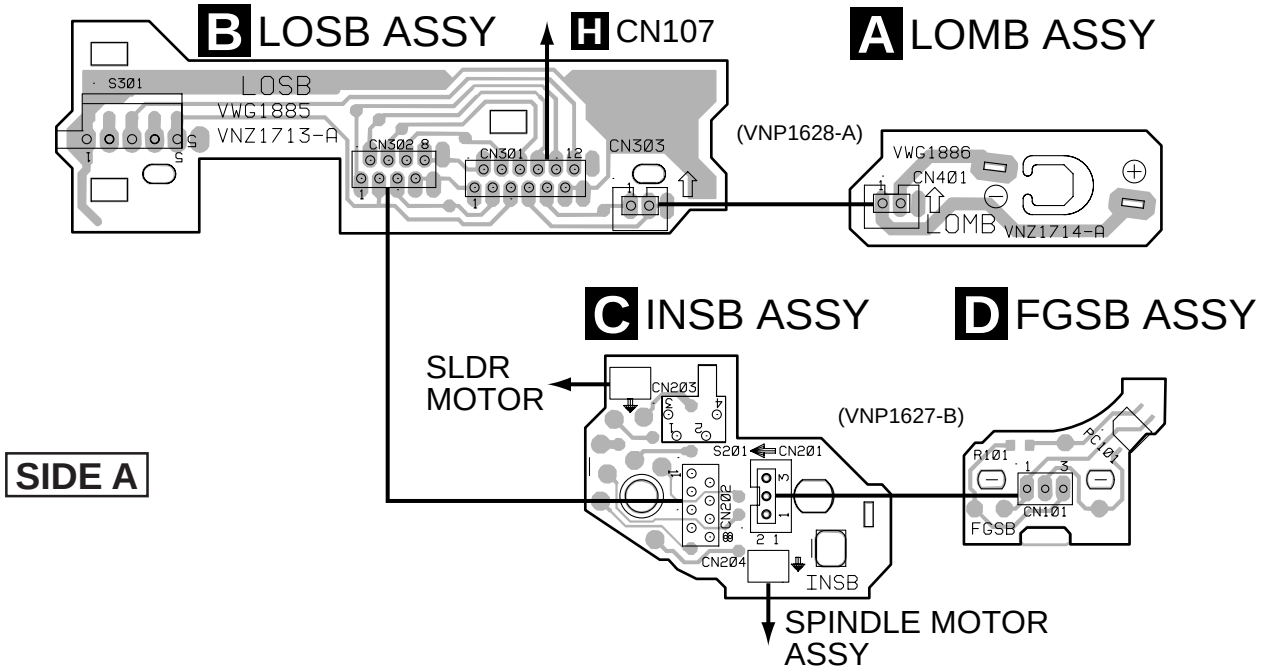
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

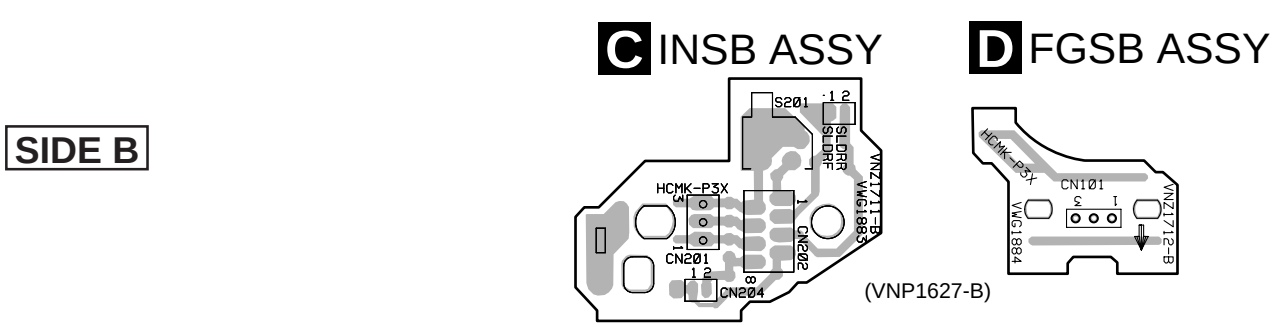
Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.

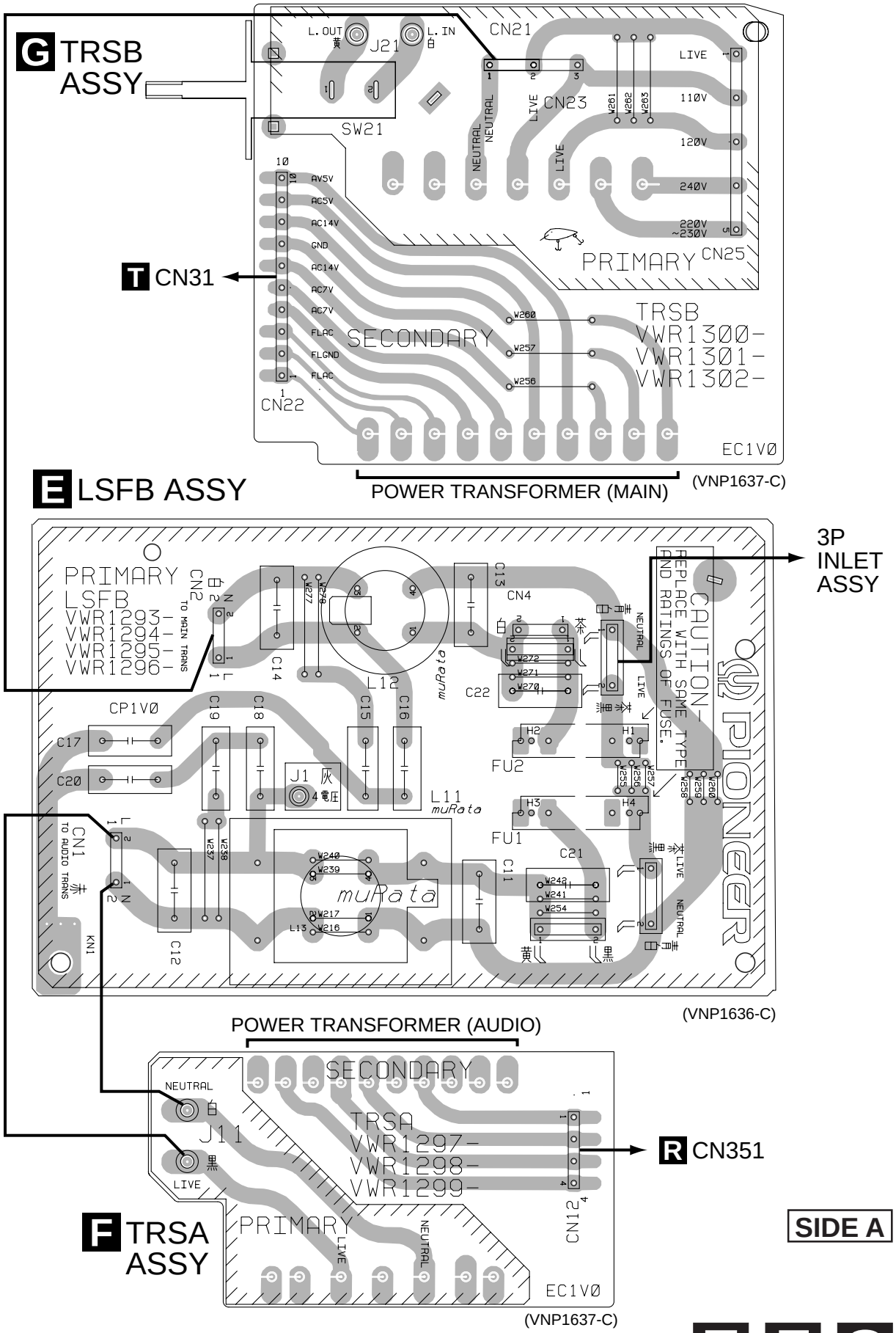


4.1 LOMB, LOSB, INSB and FGSB ASSEMBLIES



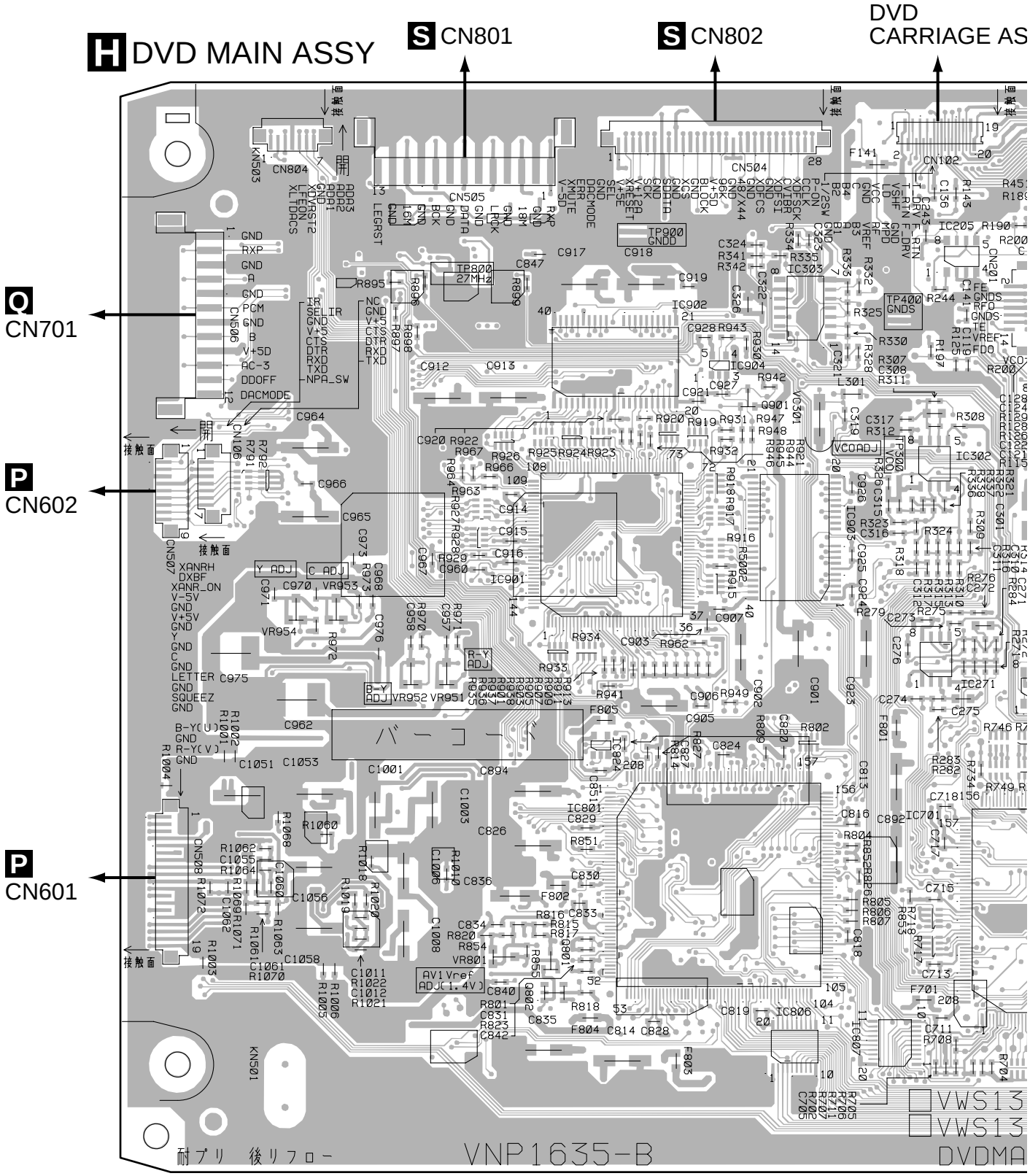


4.2 LSFB, TRSA and TRSB ASSEMBLIES

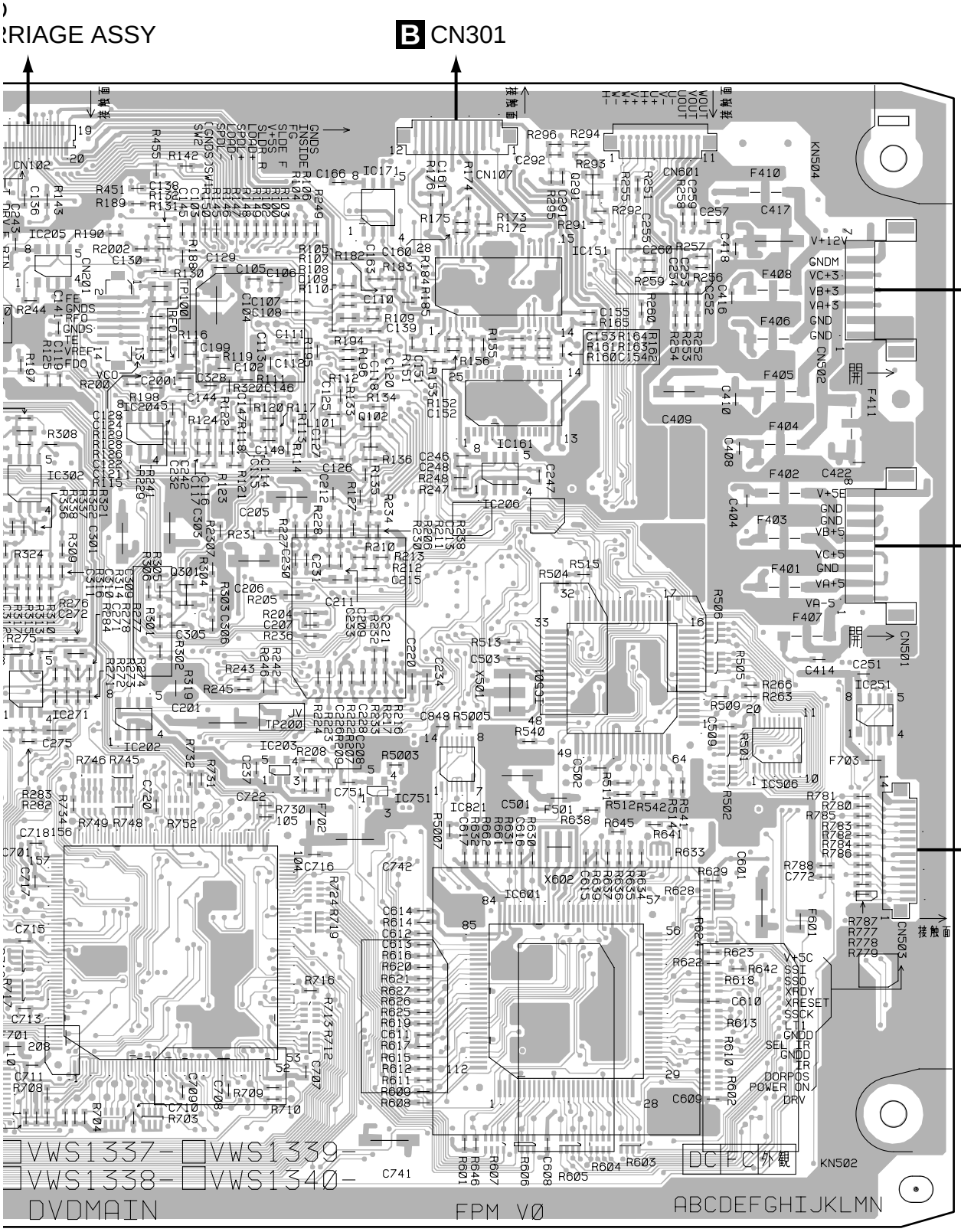


SIDE A

4.3 DVD MAIN ASSY



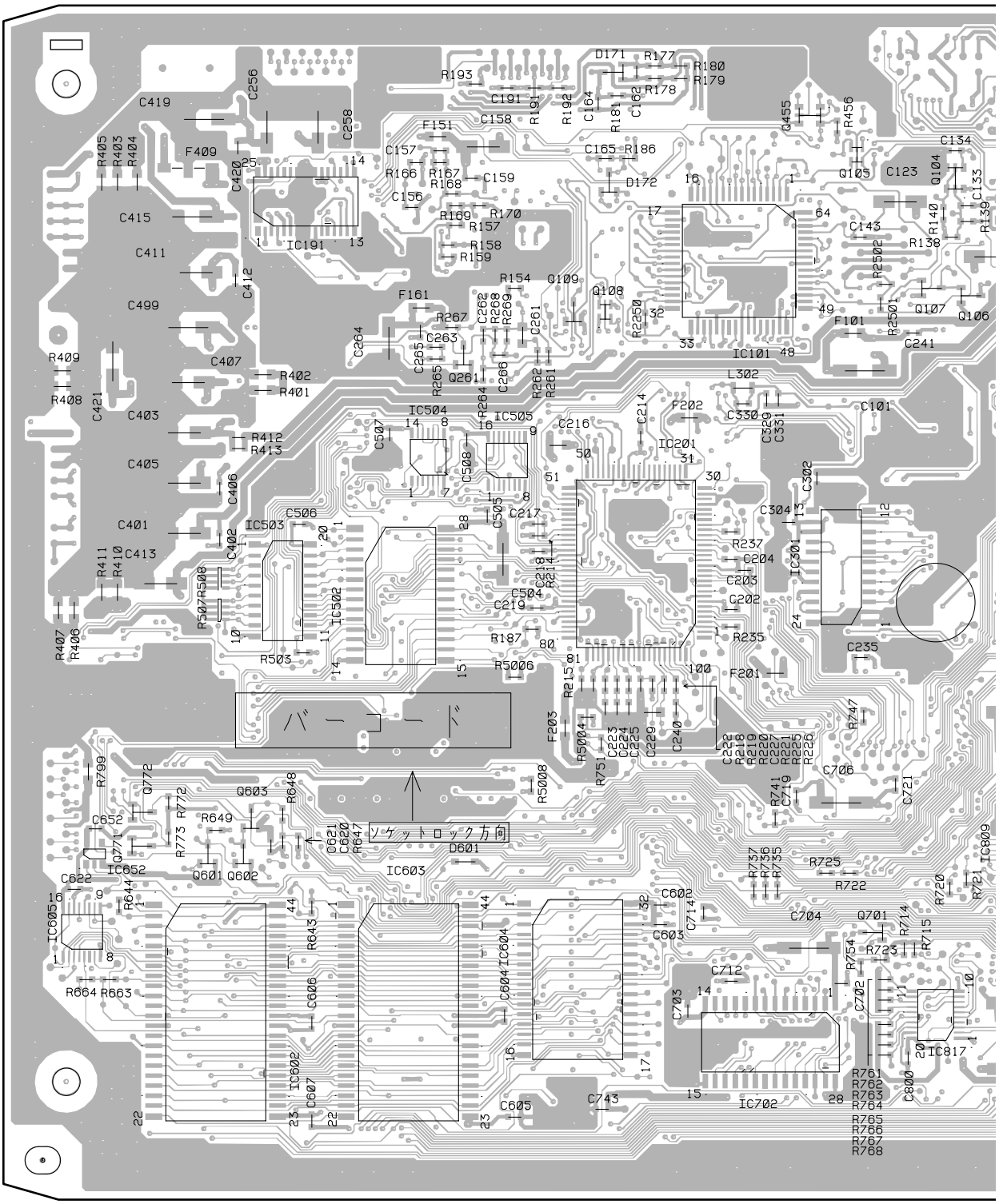
•This PCB is a four-layered board.
Middle layer is mainly connected to Vcc and GND.



IC205 IC204 Q301 IC171 IC151 Q291 IC506 IC251
IC302 IC202 Q102 IC161 IC501
IC271 IC701 IC203 IC751 IC821 IC206 IC601

SIDE A

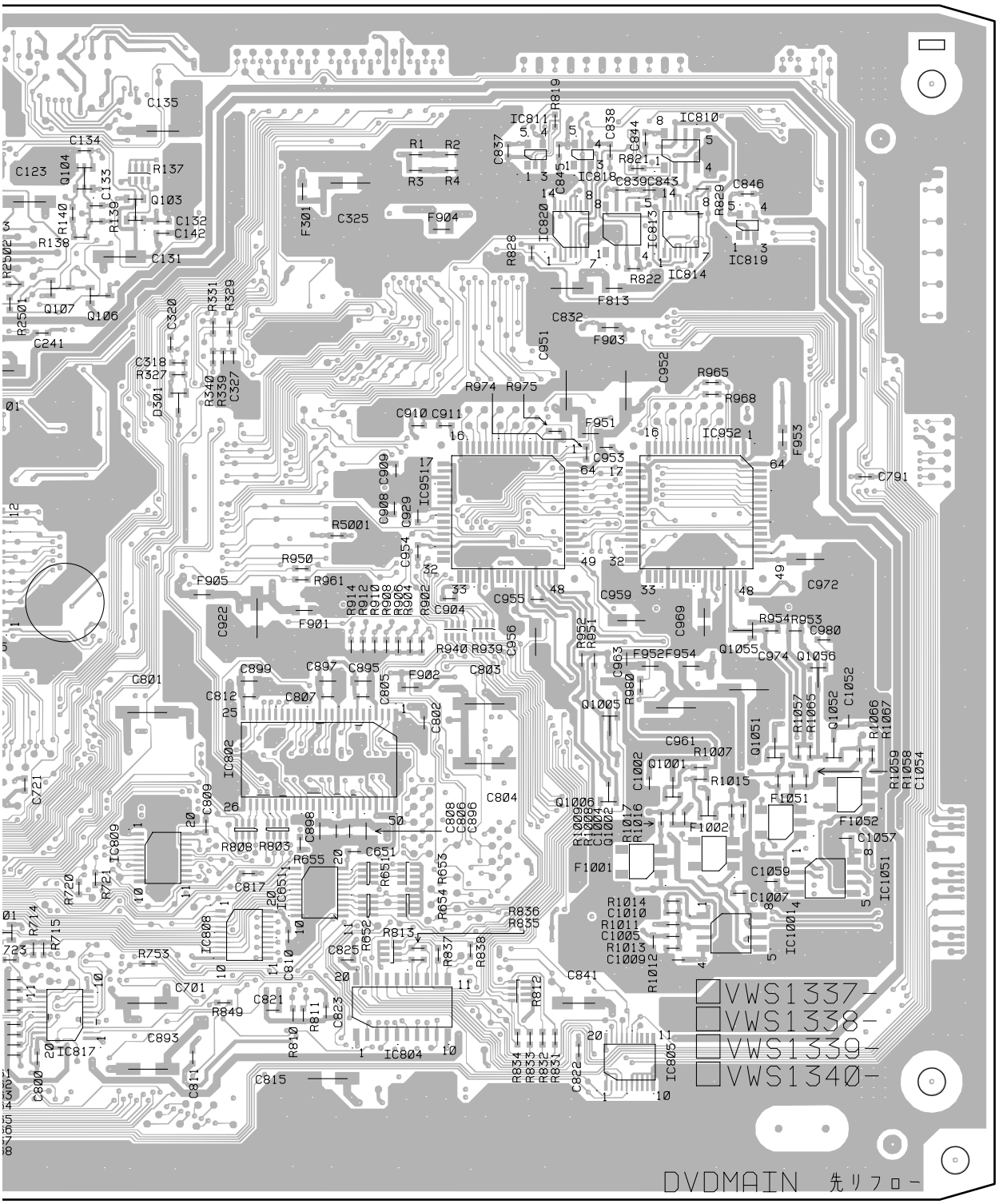
DVD MAIN ASSY



IC652 Q772 IC191 Q261 Q109 Q108 IC101 Q455 Q103–Q107
IC605 Q771 IC503 IC502 IC504 IC505 IC201 IC301
Q601–Q603 Q701
IC602 IC603 IC604 IC702 IC817

SIDE B

•This PCB is a four-layered board.
Middle layer is mainly connected to Vcc and GND.



(VNP1635-B)

Q103–Q107

IC811 IC818 IC810

IC802

IC820 IC813 IC814 IC819

'01 IC809 IC808 IC651 IC804 IC951 Q1005 IC952 Q1055 Q1056

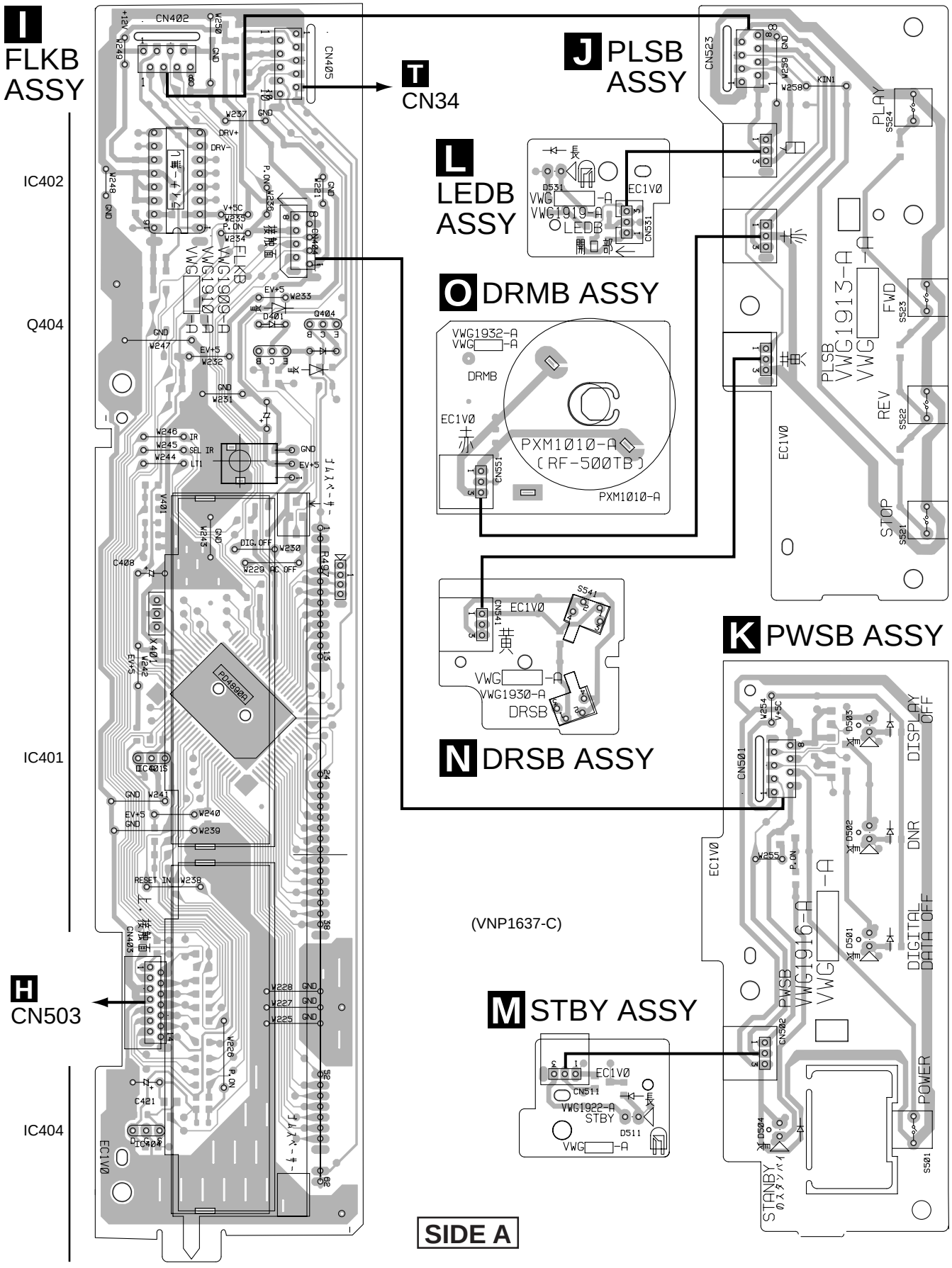
IC817

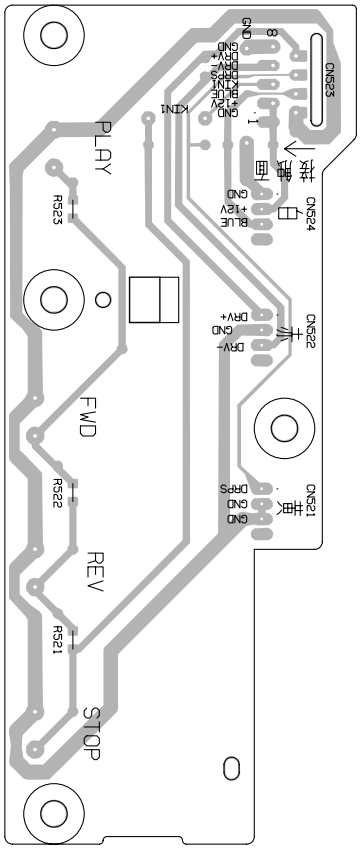
Q1006 Q1001 Q1002 Q1051 Q1052

IC805 IC1001 IC1051

SIDE B

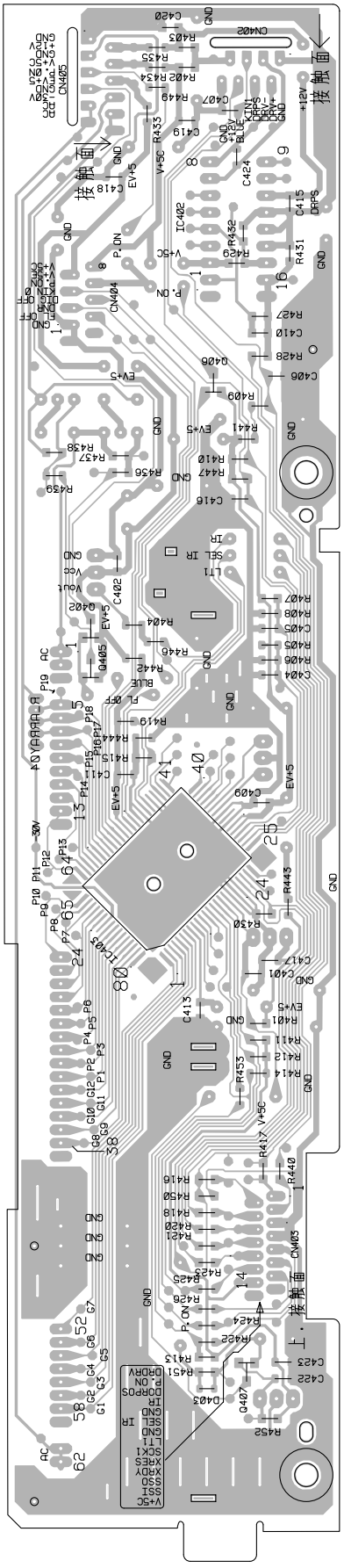
4.4 FLKB, PLSB, PWSB, LEDB, STBY, DRSB and DRMB ASSEMBLIES

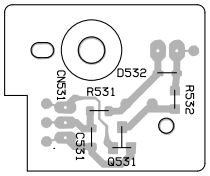




J PLSB ASSY

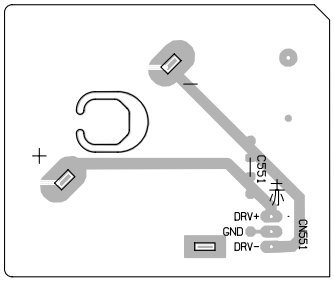
I FLKB ASSY



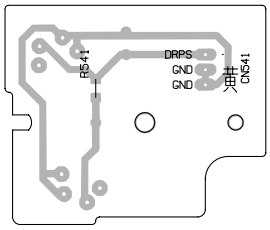


L LEDB ASSY

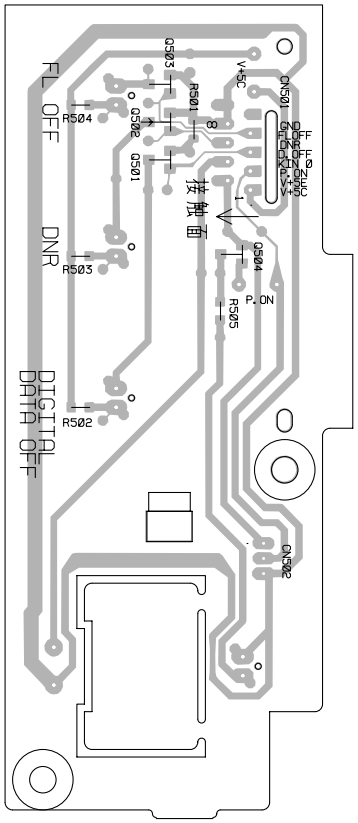
O DRMB ASSY



N DRSB ASSY



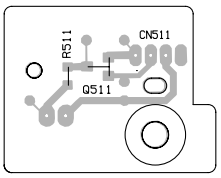
K PWSB ASSY



Q503
Q502
Q501
Q504

(VNP1637-C)

M STBY ASSY

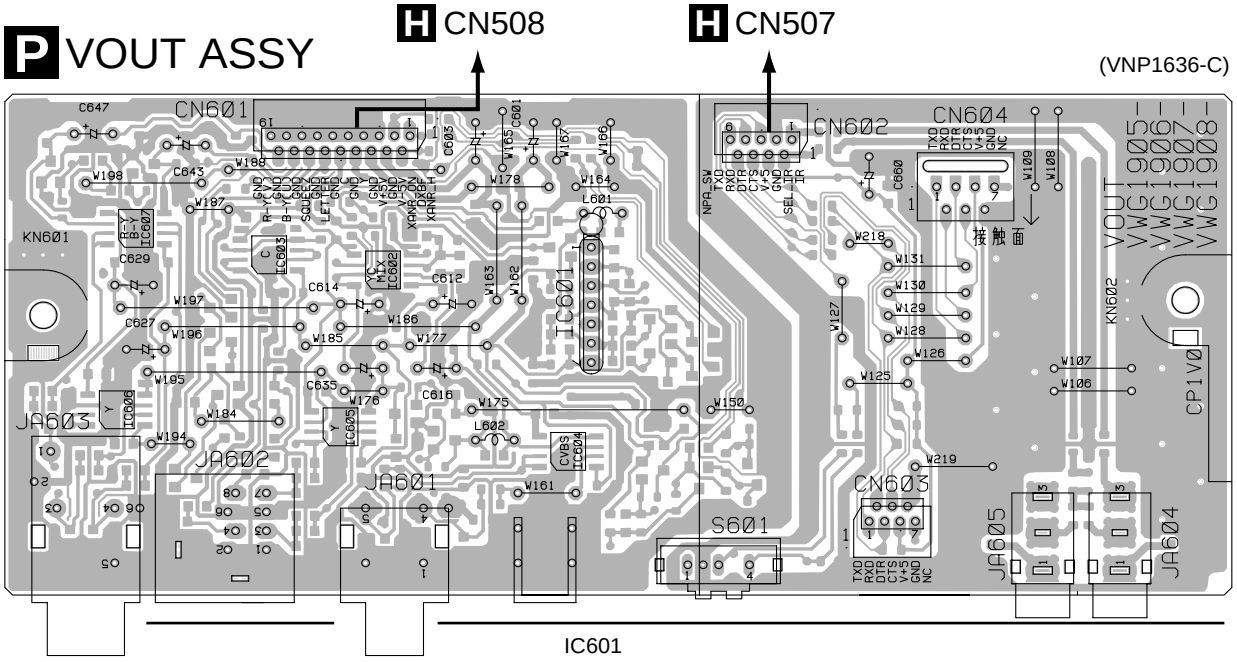


SIDE B

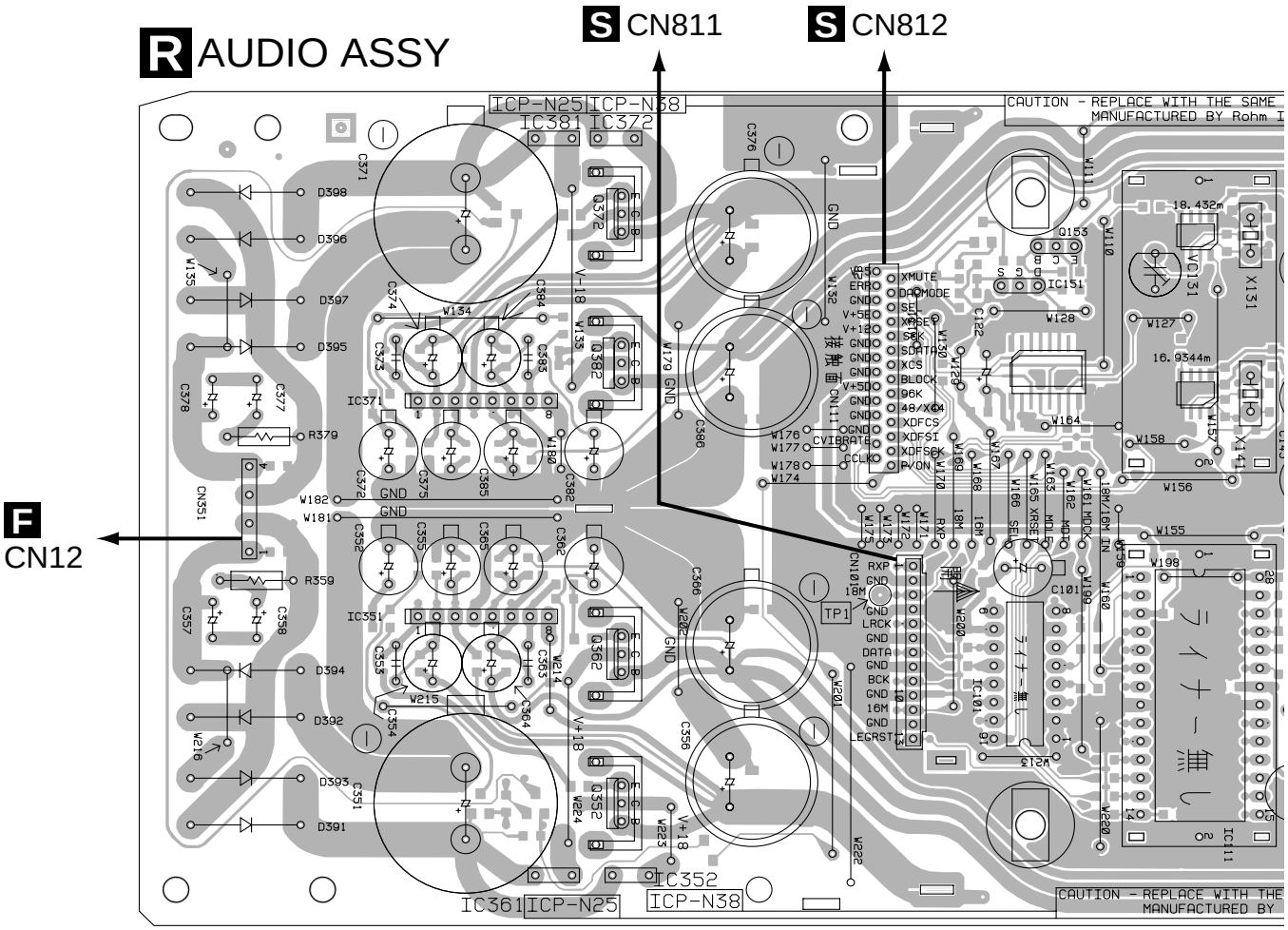
4.5 VOUT, DOUT and AUDIO ASSEMBLIES

P VOUT ASSY

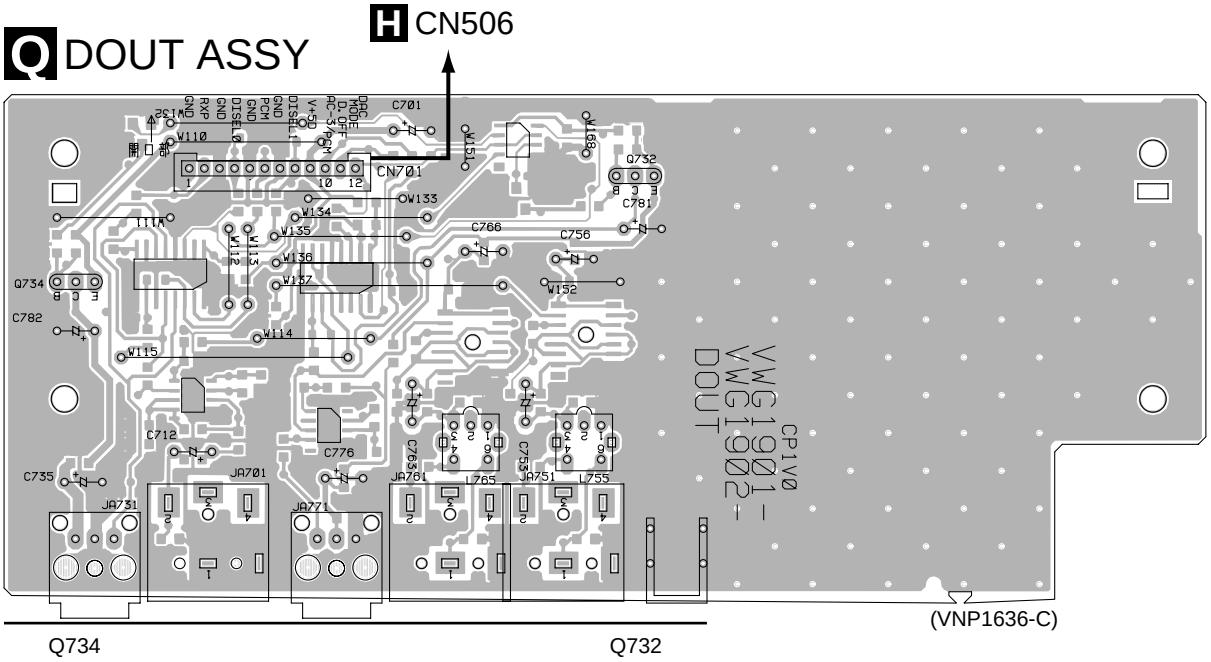
(VNP1636-C)



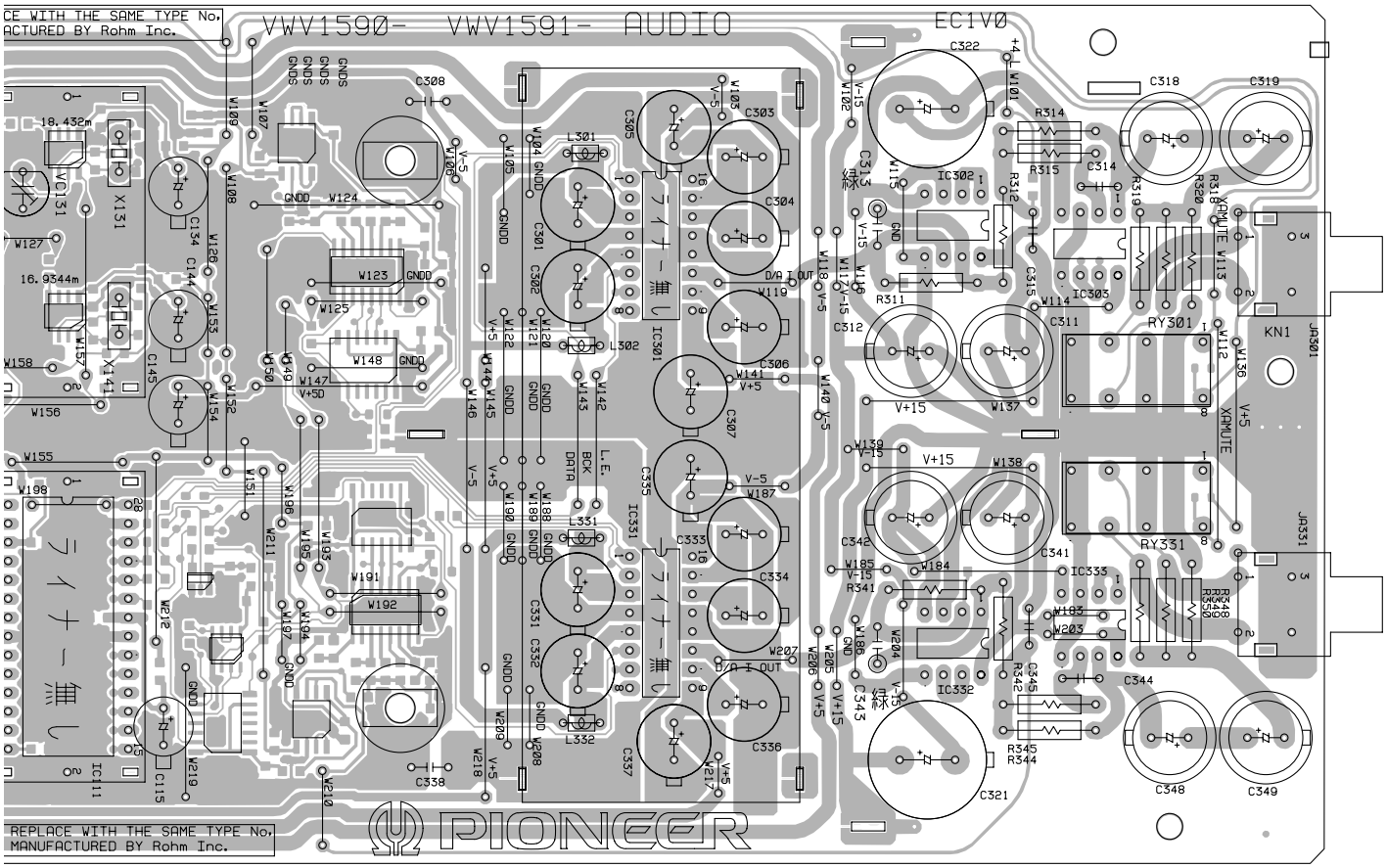
R AUDIO ASSY



SIDE A



Q734 Q732

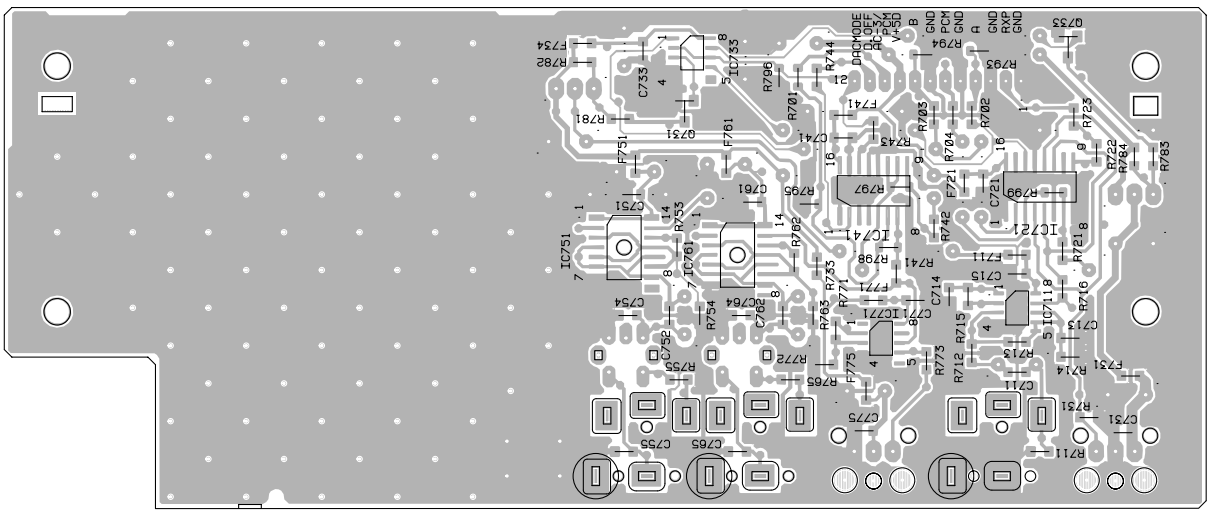


'C131

IC111 IC301 IC331 IC302 IC332 IC303 IC333

SIDE A

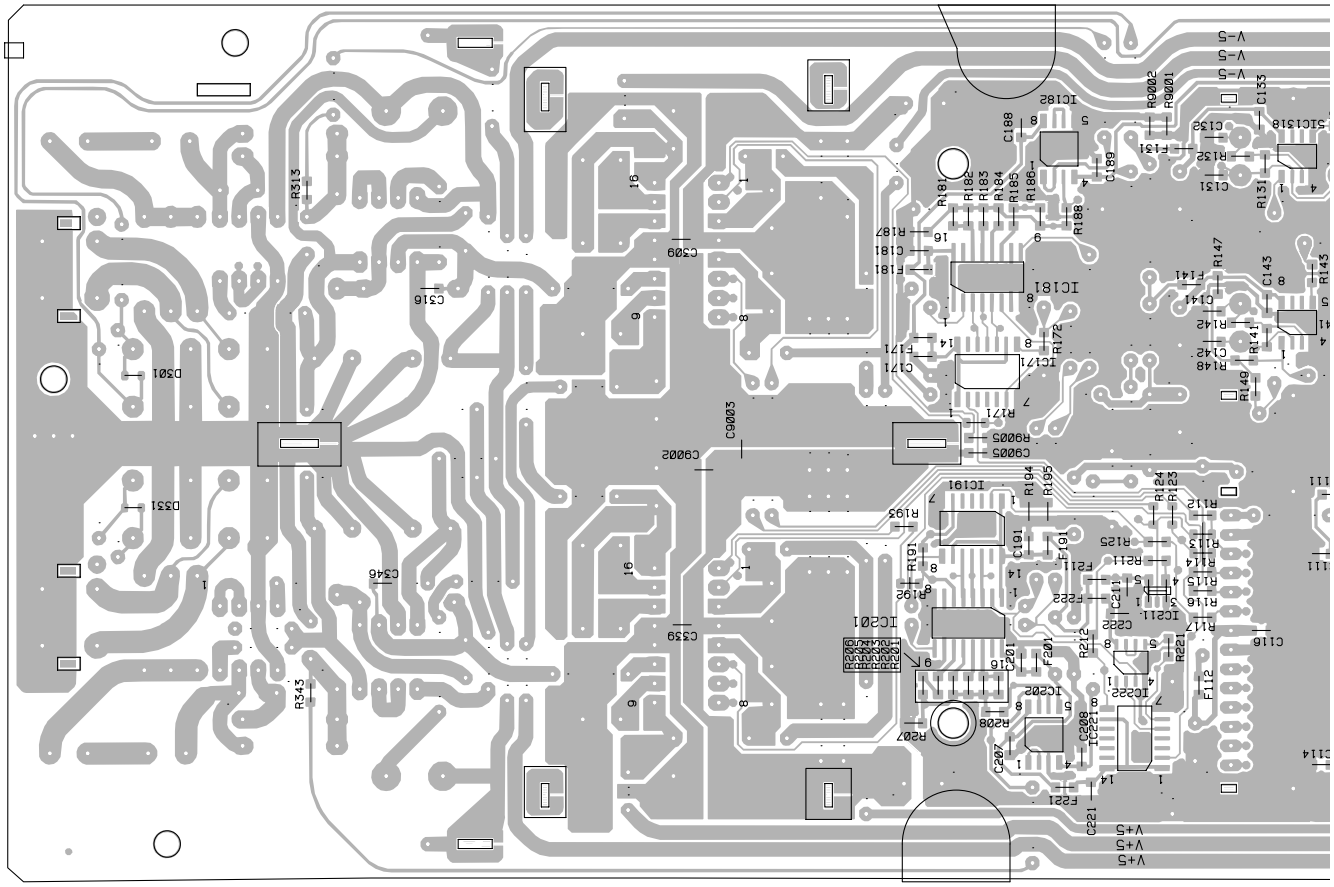
Q DOUT ASSY



(VNP1636-C)

IC751 IC733 IC761 IC741 IC721 Q733
Q731 IC771 IC711

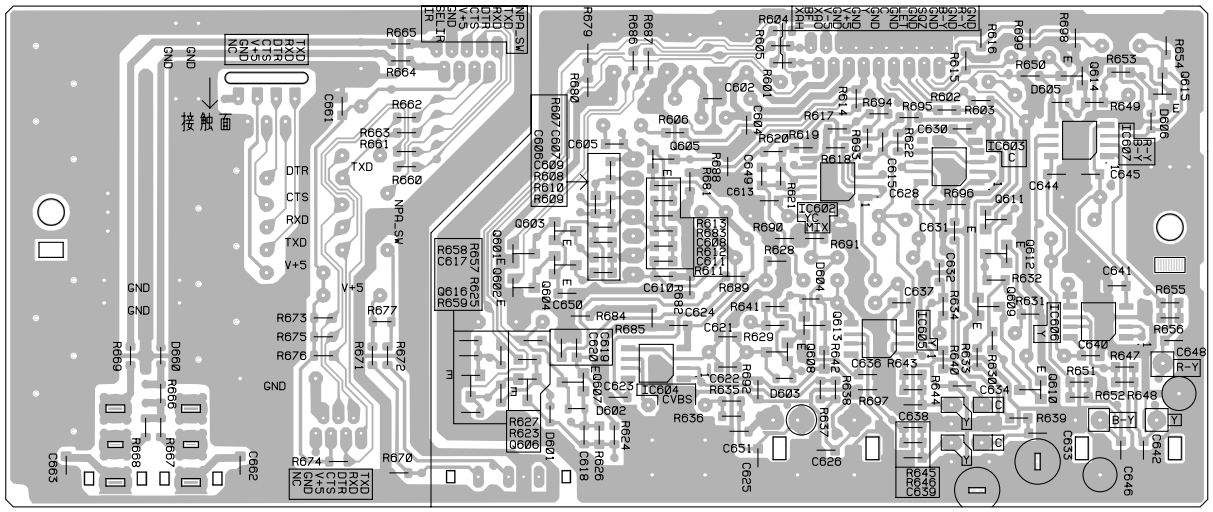
R AUDIO ASSY



(VNP1637-C)

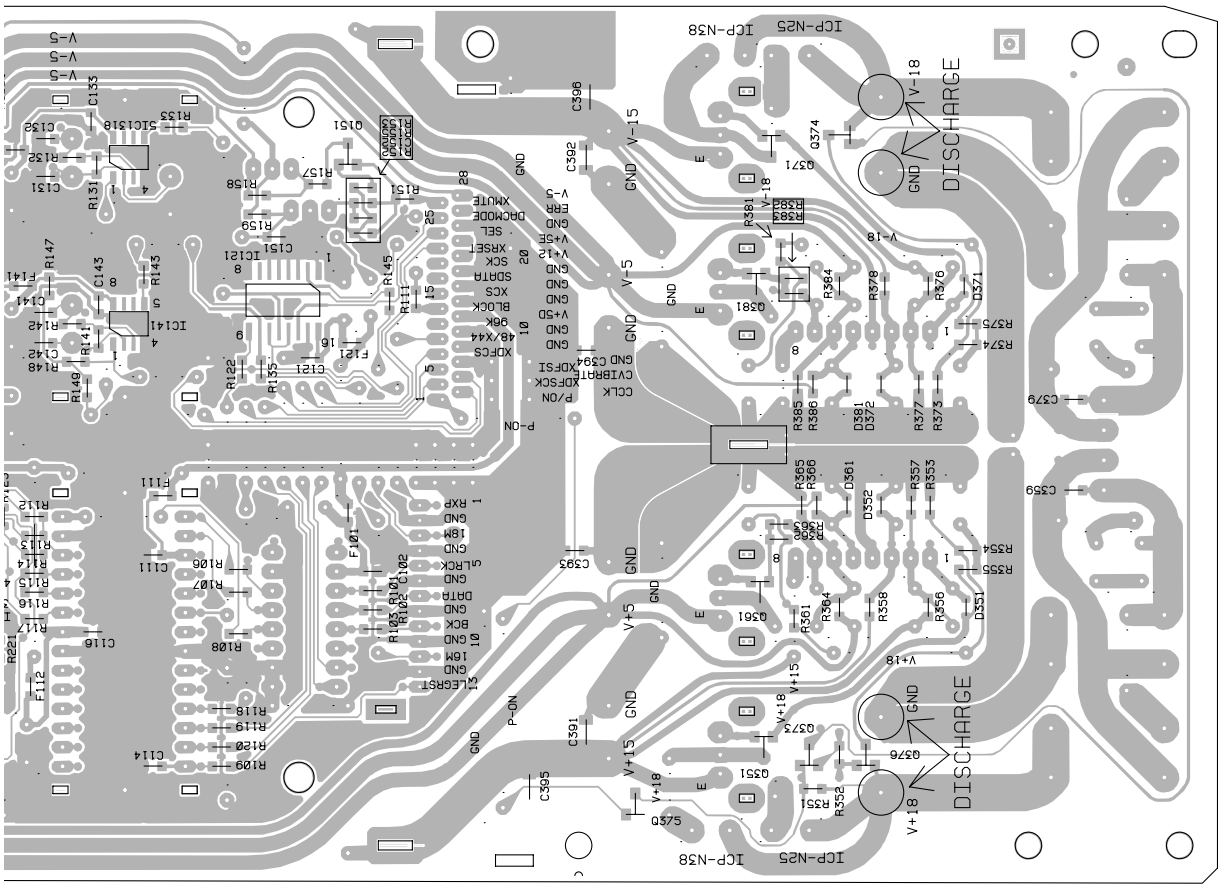
IC191 IC181 IC182 IC222 IC211 IC131
IC201 IC171 IC202 IC221 IC141

P VOUT ASSY



(VNP1636-C)

Q616 Q601–Q607 IC604 Q608 IC602 IC603 Q614 Q615
Q613 IC605 Q609–Q612 IC607 IC606

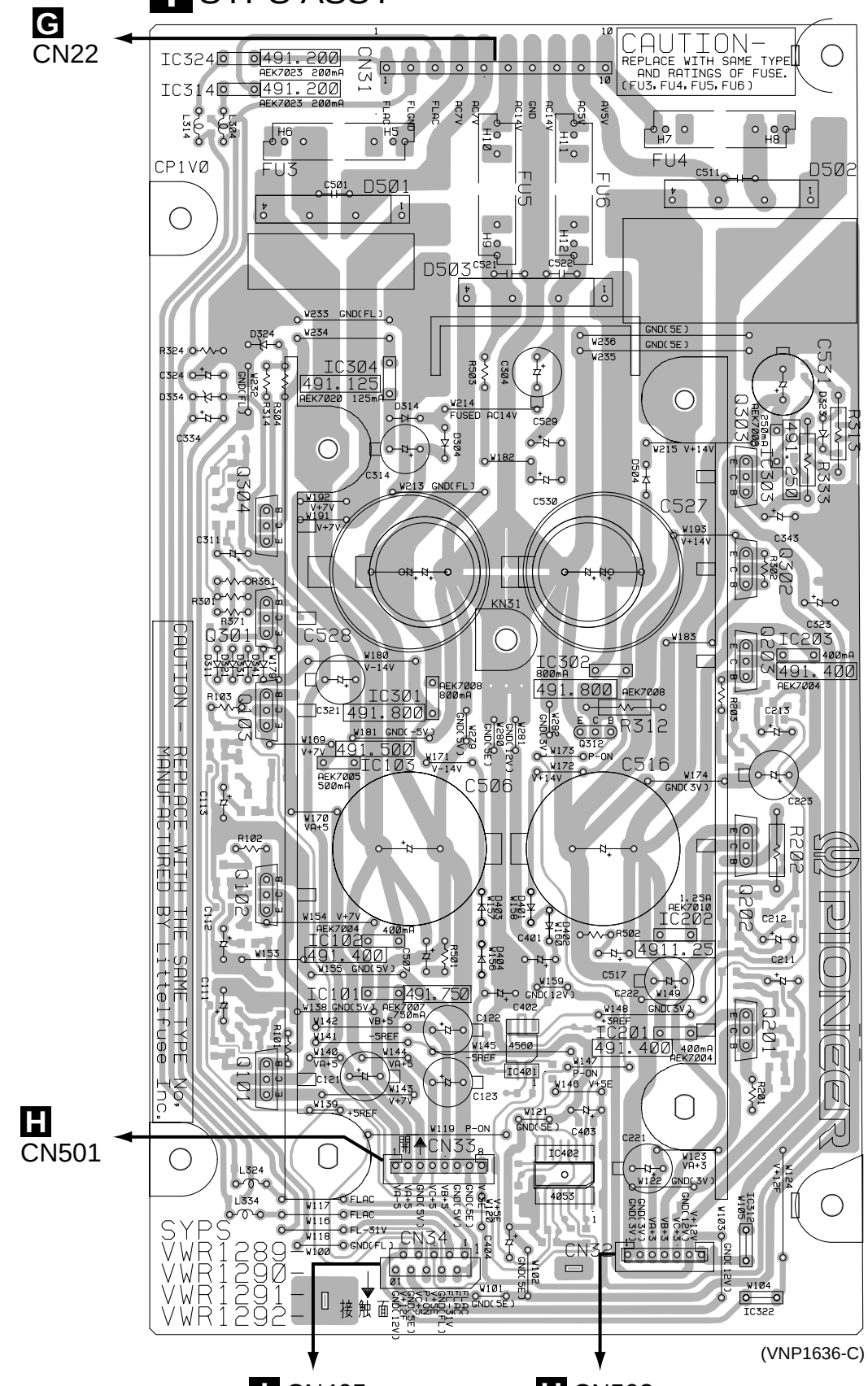


IC211 IC131 IC121 Q151 Q375 Q381 Q371 Q374
IC141 Q351 Q361 Q373 Q376

SIDE B

4.6 SYPS ASSY

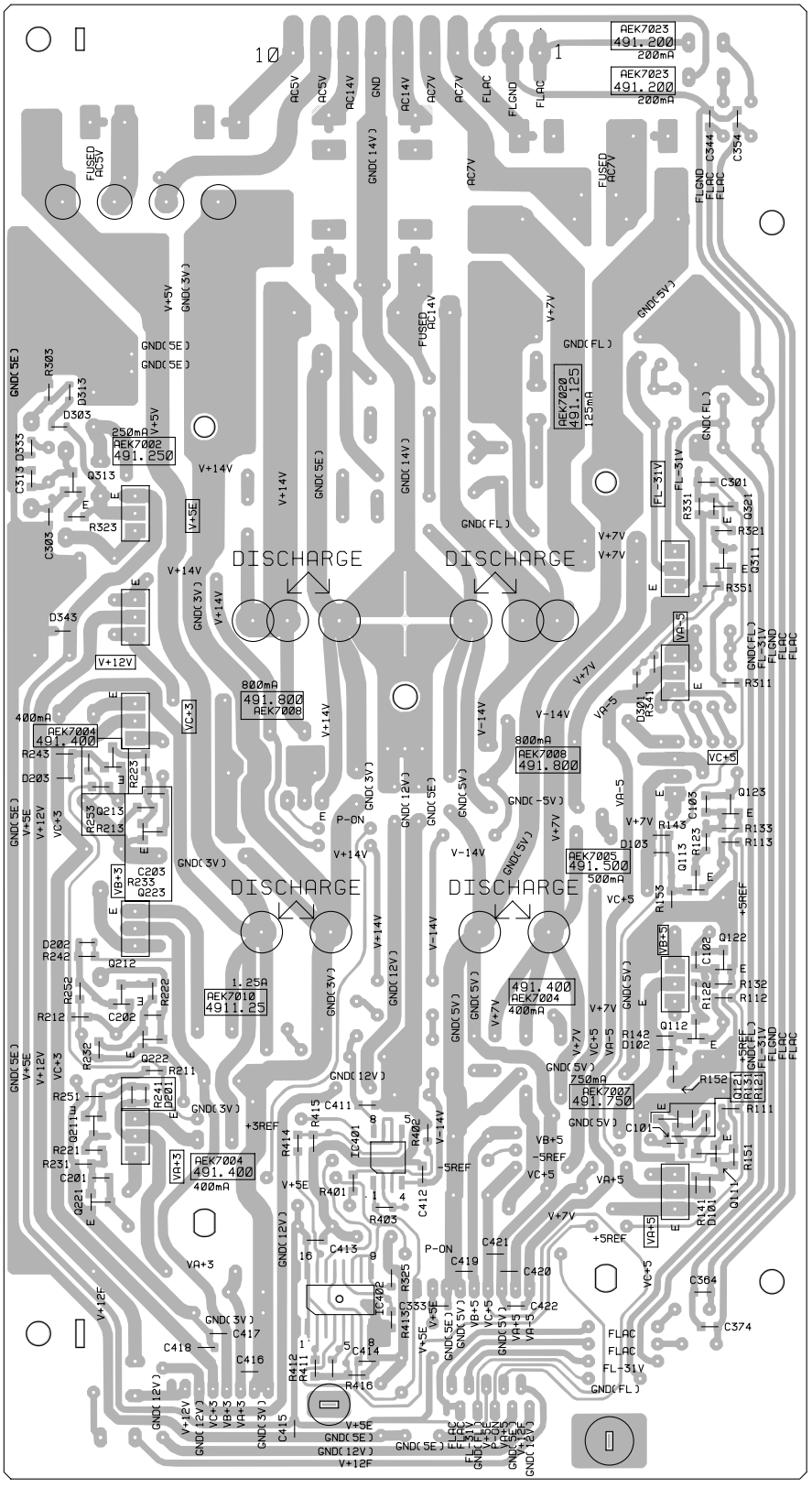
T SYPS ASSY



I CN405 H CN502

SIDE A

T SYPS ASSY

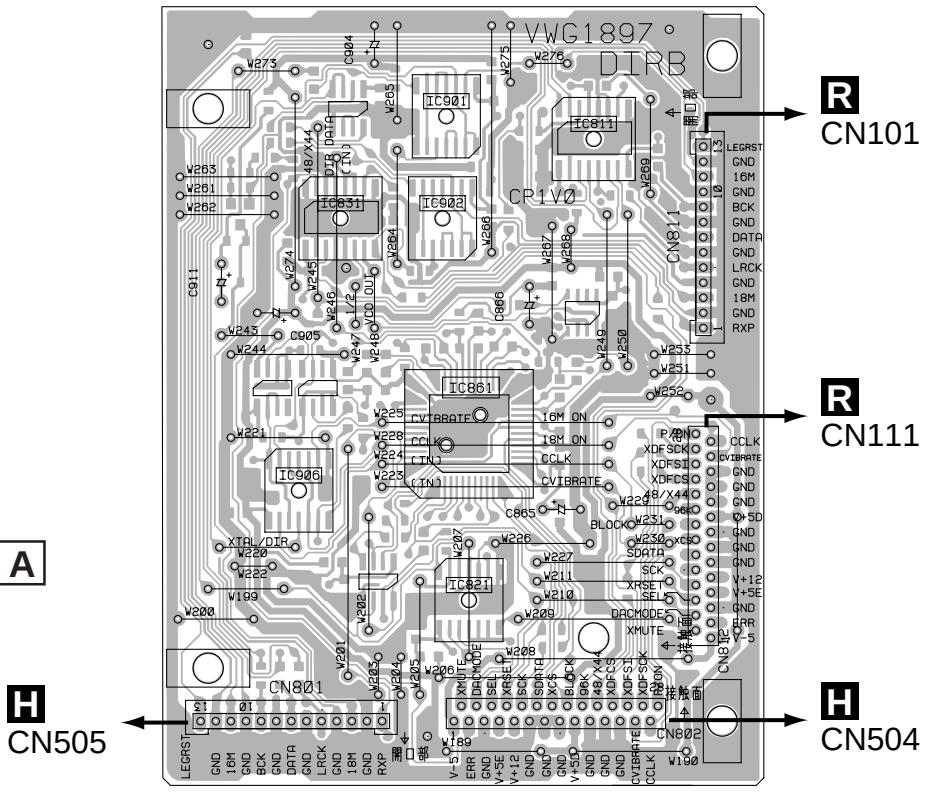


(VNP1636-C)

SIDE B

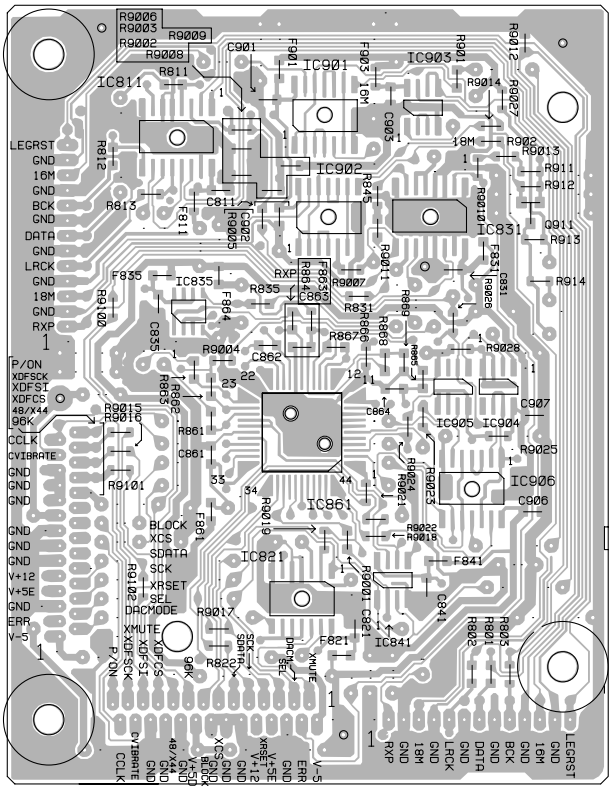
4.7 DIRB ASSY

S DIRB ASSY



(VNP1636-C)

S DIRB ASSY



(VNP1636-C)

5. PCB PARTS LIST

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*
Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560	→	*56 x 10^1*	→	*561* ····· *RD1/4PU 5 6 1 J*
47k	→	*47 x 10^3*	→	*473* ····· *RD1/4PU 4 7 3 J*
0.5	→	*R50*		····· *RN2H R 5 0 K*
1	→	*1R0*		····· *RS1P 1 R 0 K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k	→	*562 x 10^1*	→	*5621* ····· *RN1/4PC 5 6 2 1 F*

5.1 LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	Part No.		Remarks
		DV-09 /KU/CA	DV-S9 /L/TA	
NSP	LOAB ASSY	VWM1798	VWM1798	
NSP	├LOMB ASSY	VWG1886	VWG1886	
NSP	└LOSB ASSY	VWG1885	VWG1885	
NSP	SMEB ASSY	VWM1797	VWM1797	
NSP	├INSB ASSY	VWG1883	VWG1883	
NSP	└FGSB ASSY	VWG1884	VWG1884	
	DVD MAIN ASSY	VWS1337	VWS1337	
NSP	SYOUT ASSY	VWM1812	VWM1811	
	├DIRB ASSY	Not used	VWG1897	
	├DOUT ASSY	VWG1902	VWG1901	
	├VOUT ASSY	VWG1905	VWG1905	
	├SYPS ASSY	VWR1289	VWR1289	
NSP	└LSFB ASSY	VWR1293	VWR1293	
NSP	FLAUD ASSY	VWM1816	VWM1817	
	├FLKBASSY	VWG1910	VWG1911	
NSP	├PLSB ASSY	VWG1913	VWG1913	
NSP	├PWSB ASSY	VWG1916	VWG1916	
NSP	├LEDB ASSY	VWS1919	VWS1919	
NSP	├STBY ASSY	VWG1922	VWG1922	
NSP	├DRSB ASSY	VWG1930	VWG1930	
NSP	├DRMB ASSY	VWG1932	VWG1932	
NSP	├TRSA ASSY	VWR1298	VWR1297	
NSP	├TRSB ASSY	VWR1300	VWR1300	
	└AUDIO ASSY	VWV1591	VWV1590	

TRSA ASSY

VWR1298 and VWR1297 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		VWR1298	VWR1297	
	J11	VKP2186	VKP2165	

FLKB ASSY

VWG1910 and VWG1911 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		VWG1910	VWG1911	
	R407	RS1/10S123J	RS1/10S472J	
	R408	RS1/10S202J	RS1/10S123J	

AUDIO ASSY

VWV1591 and VWV1590 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		VWV1591	VWV1590	
	F101,F111 (CHIP BEAD)	Not used	DTF1070	
	F133,F143 (CHIP BEAD)	DTF1069	Not used	
	C351,C371 (2200 µF/50V)	VCH1160	VCH1125	
	C356,C366,C376,C386 (220 µF/50V)	VCH1161	VCH1140	
	C391,C392	CKSYF225Z25	Not used	
	C393,C394	CKSQYF225Z16	Not used	
	R111	RS1/10S0R0J	Not used	
	R133,R143	Not used	RS1/10S101J	
	R147-R149	RS1/10S103J	Not used	
	R314,R344	RDR1/2PM222J	RDR1/2PM242J	
	JA301 (2P PIN JACK)	VKB1095	VKB1103	
	JA331 (2P PIN JACK)	VKB1096	VKB1104	

DOUT ASSY

VWG1902 and VWG1901 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		VWG1902	VWG1901	
	IC711	Not used	TC7WU04F	
	IC721,IC741	Not used	TC74HC153AF	
	IC733	Not used	TC7W08F	
	Q731,Q733	Not used	PDTC124EK	
	Q732,Q734	Not used	2SB1237X	
	F711,F721,F731,F734,F741 (CHIP BEAD)	Not used	DTF1070	
	C711	Not used	CKSQYF103Z50	
	C712	Not used	CEBA470M10	
	C713	Not used	CCSQCH101J50	
	C714	Not used	CCSQCH220J50	
	C715,C721,C731,C733,C741	Not used	CKSQYF104Z25	
	C735,C781,C782 (100 µF/10V)	Not used	VCH1100	
	R711	Not used	RS1/10S750J	
	R712,R723,R743,R744	Not used	RS1/10S0R0J	
	R713	Not used	RS1/10S473J	
	R714	Not used	RS1/10S222J	
	R715,R716,R722	Not used	RS1/10S101J	
	R731	Not used	RS1/10S223J	
	R781-R784	Not used	RS1/10S472J	
	R797-R799	RS1/10S0R0J	Not used	
	JA701 (1P PIN JACK)	Not used	PKB1004	
	JA731 (OPTICAL OUTPUT)	Not used	GP1F32R	

5.2 PARTS LIST FOR DV-09

Mark	No.	Description	Part No.

LOAB ASSY

OTHERS

		PC BOARD LOAB	VNP1628

A LOMB ASSY

OTHERS

	CN401	KR CONNECTOR	B2B-PH-K-S

B LOSB ASSY

SWITCH

	S301		VSK1011

OTHERS

	CN303	KR CONNECTOR	B2B-PH-K-S
	CN302	8P FFC CONNECTOR	VKN1268
	CN301	12P FFC CONNECTOR	VKN1272

SMEB ASSY

OTHERS

		PC BOARD (SMEB)	VNP1627

C INSB ASSY

SWITCH

	S201		DSG1017

OTHERS

	CN201	KR CONNECTOR 3P	B3B-PH-K-S
		PCB BINDER	DEF1012
	CN202	8P FFC CONNECTOR	VKN1239

D FGSB ASSY

SEMICONDUCTOR

	PC101		GP2S27(B)

RESISTORS

	All Resistors		RS1/10S□□□J

OTHERS

	CN101	KR CONNECTOR 3P	B3B-PH-K-S

E LSFB ASSY

COILS AND FILTERS

⚠	L11	(0.8mH/ 6A)	DTH1164
⚠	L12	FILTER	VTL-004

Mark	No.	Description	Part No.

CAPACITORS

⚠	C11-C14	(10000pF/ AC250V)	ACG7020

OTHERS

	H1-H4	FUSE CLIP	AKR1003
⚠	CN2	2P-VH CONNECTOR	B2P3-VH
		PCB BINDER	VEF1040
⚠		TERMINAL	VKC-019
	KN1	EARTH METAL FITTING	VNF1084

F TRSA ASSY

OTHERS

	CN12	4P-VH CONNECTOR	B4P-VH
⚠	J11	HOUSING ASSY	VKP2186

G TRSB ASSY

OTHERS

⚠	CN21	2P-VH CONNECTOR	B2P3-VH
		PCB BINDER	VEF1040

H DVD MAIN ASSY

SEMICONDUCTORS

	IC171	BA10393F
	IC161	BA6195FP
	IC151	BA6797FP
	IC813	CY2081SL-611
	IC702	HM514800CJ-7
	IC101	LA9700M
	IC201	LC78650NE
	IC902,IC903	M5M4V4265CTP-6
	IC951,IC952	M65677FP
	IC802	MB811171622A-100FN
	IC801	MB86371
	IC1001,IC1051	MC14577CF
	IC271,IC302	NJM2100M
	IC203	NJM2107F
	IC901	PD0259A
	IC601	PD3381A
	IC701	PD4833A
	IC501	PD4889A
	IC602	PDK026C
	IC502	SRM2B256SLMX70
	IC202,IC204,IC251	TC4W53F
	IC604	TC551001BFL-85
	IC503	TC74HC573AF
	IC804	TC74HCT541AF
	IC303	TC74HCU04AF

Mark	No.	Description	Part No.
	IC807,IC808		TC74LCX245FT
	IC821		TC74VHC00FT
	IC814,IC820		TC74VHC02FT
	IC505,IC605		TC74VHC139FT
	IC504		TC74VHC20FT
	IC805,IC806,IC809		TC74VHC541FT
	IC651		TC74VHC574FT
	IC506		TC74VHCT245AFT
	IC817		TC74VHCT541AFT
	IC652		TC7SH32F
	IC811,IC818,IC819		TC7SHU04F
	IC810		TC7WU04F
	IC301		TLC5540INS
	IC603		VKH1012
	IC6003		VYW1558
	Q1001,Q1002,Q1051,Q1052		2SC2412K
	Q701		2SK2033
	Q108		HN1K03FU
	Q455		IMT1A
	Q103		IMX1
	Q102,Q104,Q291,Q301		IMZ1A
	Q106,Q603		PDTA114EK
	Q1005,Q1006,Q1055,Q1056		PDTA143EK
	Q107,Q109,Q261,Q602		PDTC114EK
	Q601,Q771,Q772		PDTC114TK
	D301		KV1410
	D171,D172		MA152WK
	D601		RB501V-40

COILS AND FILTERS

Mark	No.	Description	Part No.
	F101,F141,F151,F161	(CHIP BEADS)	DTF1070
	F201-F203,F301,F501,F601		DTF1070
	F701-F703,F801-F805,F813		DTF1070
	F901-F905,F951-F954		DTF1070
	L777-L787	(CHIP SOLID INDUCTOR)	QTL1011
	F1001,F1002,F1051,F1052	(LPF)	VTF1101
	F401-F411	(CHIP EMI FILTER)	VTH1037
	L301	(1.5µH)	VTL1059
	L101,L302	(10µH)	VTL1061
⚠	L896,L897	(CHIP BEADS)	VTL1074
⚠	L895,L898,L899	(CHIP BEADS)	VTL1075

CAPACITORS

Mark	No.	Description	Part No.
	C152,C208,C291,C612,C613		CCSRCH101J50
	C111,C139,C215,C231-C233		CCSRCH151J50
	C125,C148,C329		CCSRCH180J50
	C112,C118		CCSRCH220J50
	C121,C130,C199,C319,C324		CCSRCH330J50
	C120		CCSRCH331J50
	C310,C323		CCSRCH470J50
	C230		CCSRCH471J50
	C126,C331,C838		CCSRCH560J50
	C1010,C1012,C1060,C1062,C127		CCSRCH5R0C50
	C330		CCSRCH5R0C50
	C160		CCSRCH680J50
	C1001,C1003,C1006,C1008,C101		CEV101M6R3
	C104,C1051,C1053,C1056,C1058		CEV101M6R3
	C201,C325,C421,C499,C601		CEV101M6R3
	C701,C704,C706,C741,C742		CEV101M6R3
	C901,C902,C905,C912,C913		CEV101M6R3
	C917,C918,C922,C923		CEV101M6R3
	C951,C952,C961,C964,C965		CEV101M6R3
	C974		CEV101M6R3
	C123,C158,C264		CEV220M16
	C801,C803,C804,C813-C815		CEV221M4
	C826,C835,C892-C894		CEV221M4
	C956,C959,C969,C972		CEV2R2M50
	C415,C417,C419		CEV330M25
	C131,C135,C205,C206,C301		CEV470M6R3
	C303,C401,C403,C405,C407		CEV470M6R3
	C409,C411,C413,C501,C504		CEV470M6R3
	C832,C836,C841		CEV470M6R3
	C211		CKSQYB104K25
	C109,C124,C216,C220,C229		CKSQYB105K10
	C234,C261,C275,C308,C326		CKSQYB105K10
	C895-C899		CKSQYF225Z16
	C213,C292,C309,C321		CKSRYB102K50
	C105,C106,C108,C146,C147		CKSRYB103K50
	C151,C154-C157,C161,C207		CKSRYB103K50
	C217,C221,C263,C265,C276		CKSRYB103K50
	C318,C320,C620,C705,C722		CKSRYB103K50
	C772		CKSRYB103K50
	C143,C162-C165,C223,C224		CKSRYB104K16
	C242,C274,C311,C312,C315		CKSRYB104K16
	C141		CKSRYB222K50
	C328		CKSRYB223K25
	C262,C271		CKSRYB472K50
	C122		CKSRYB473K16
	C1002,C1004,C1007,C1009		CKSRYF104Z16
	C102,C103,C1052,C1054,C1057		CKSRYF104Z16
	C1059,C113,C129,C132-C134		CKSRYF104Z16
	C136,C159,C166,C191		CKSRYF104Z16
	C202-C204,C209,C214		CKSRYF104Z16
	C218,C219,C222,C226-C228		CKSRYF104Z16
	C235,C237,C241,C251,C273		CKSRYF104Z16
	C302,C304,C305,C317,C322		CKSRYF104Z16
	C402,C404,C406,C408,C410		CKSRYF104Z16
	C412,C414,C416,C418,C420		CKSRYF104Z16
	C422,C502,C503,C505-C509		CKSRYF104Z16
	C602-C611,C614-C617		CKSRYF104Z16
	C621,C622,C651,C652		CKSRYF104Z16
	C702,C703,C707-C721,C743		CKSRYF104Z16
	C791,C800,C802,C805-C812		CKSRYF104Z16
	C816-C825,C827-C830		CKSRYF104Z16
	C833,C834,C837,C839,C840		CKSRYF104Z16
	C842-C848,C903,C904		CKSRYF104Z16
	C906-C911,C914-C916		CKSRYF104Z16
	C919-C921,C924-C926		CKSRYF104Z16

Mark	No.	Description	Part No.
	C953-C955,C960,C963		CKSRYF104Z16
	C966-C968,C973,C976		CKSRYF104Z16
	C962,C975	(47µF/6.3V)	VCH1158
	VC301	(40pF)	VCM1010
RESISTORS			
	R915-R920,R923-R926		RA4C0R0J
	R507,R508,R624,R628,R633		RA4C103J
	R653,R654,R703,R704		RA4C103J
	R717,R718,R745,R746,R792		RA4C103J
	R812,R813		RA4C103J
	R137,R501,R502,R505,R506		RA4C220J
	R602-R607,R610,R613,R618		RA4C220J
	R651,R652,R712,R713,R719		RA4C220J
	R724,R748,R749,R752,R791		RA4C220J
	R802,R803,R808,R927,R928		RA4C220J
	R933,R934		RA4C220J
	R319,R401-R411,R799		RS1/10S0R0J
	R205		RS1/10S101J
	R117,R118		RS1/16S1501F
	R126		RS1/16S1502F
	R241		RS1/16S2202F
	R110,R153,R155,R173,R174		RS1/16S2702F
	R213,R228-R230		RS1/16S2702F
	R152,R156,R158-R164		RS1/16S4702F
	R167-R170,R172,R175,R194		RS1/16S4702F
	R227		RS1/16S4702F
	VR951-VR954	(1kΩ)	VCP1125
	Other Resistors		RS1/10S□□□ J
OTHERS			
	CN506	3P PH CONNECTER	S12B-PH-SM3
	CN505	13P PH CONNECTER	S13B-PH-SM3
	CN502	7P PH CONNECTER	S7B-PH-SM3
	CN501	8P PH CONNECTER	S8B-PH-SM3
		FLEXIBLE CABLE	VDA1681
	TP100,TP200,TP300		VKF1001
	TP400,TP800,TP900		VKF1001
	CN201	14P CONNECTER	VKN1324
	CN507	9P FFC CONNECTER	VKN1413
	CN107	12P FFC CONNECTER	VKN1416
	CN503	14P FFC CONNECTER	VKN1418
	CN508	19P FFC CONNECTER	VKN1423
	CN504	28P FFC CONNECTER	VKN1432
	CN102	20P FFC CONNECTER	VKN1460
	KN501-KN504		VNF1109
		LABEL	VRW1634
	X602	CERAMIC RESONATOR (20MHz)	VSS1114
	X501	CERAMIC RESONATOR (10MHz)	VSS1115

Mark	No.	Description	Part No.
I FLKB ASSY			
SEMICONDUCTORS			
	IC402		BA6195
	IC403		PD4890A
	IC401,IC404		PST994C
⚠	Q403,Q404		2SD1858X
	Q402,Q405,Q406		PDTA124EK
	Q407		PDTC124EK
	D401,D402		1SR139-400-TA
	D403		MA111
COILS AND FILTERS			
	F401-F404		DTF1070
	L401		VTH1024
CAPACITORS			
	C403,C408,C421		CEAL470M6R3
	C406,C407,C416		CKSQYF102Z50
	C401,C402,C404,C405		CKSQYF103Z50
	C409-C411,C413,C417-C420		CKSQYF103Z50
	C422,C423		CKSQYF103Z50
	C415		CKSQYF104Z25
RESISTORS			
	R497		RA3T104J
	R429,R432		RS1/10S1002F
	R427,R431		RS1/10S2002F
	R428		RS1/10S3002F
	Other Resistors		RS1/10S□□□ J
OTHERS			
	CN404	8P FFC CONNECTOR	52045-0845
	CN402	8P FFC CONNECTOR	52492-0820
	CN405	10P FFC CONNECTOR	52492-1020
	401	REMOTE RECEIVER UNIT	GP1U27X
	V401	FL TUBE	VAW1047
	CN403	14P CONNECTOR	VKN1218
	X401	CERAMIC RESONATOR(5MHZ)	VSS1104
J PLSB ASSY			
SWITCHES			
	S521-S524		RSG1030
RESISTORS			
	All Resistors		RS1/10S□□□ J
OTHERS			
	CN523	8P FFC CONNECTOR	52492-0820
	CN524	3P KR CONNECTOR	S3B-PH-K-S

Mark	No.	Description	Part No.

K PWSB ASSY

SEMICONDUCTORS

	Q501-Q503	PDTC124EK
	D501-D503	SLP9118C51H

SWITCH

	S501	RSG1030

RESISTORS

	All Resistors	RS1/10S□□□ J

OTHERS

	CN501 8P FFC CONNECTOR	52492-0820
	CN502 3P KR CONNECTOR	S3B-PH-K-S

L LEDB ASSY

SEMICONDUCTORS

	Q531	PDTC124EK
	D531	LNG989CNBW
	D532	UDZS6.2B

CAPACITOR

	C531	CKSQYF103Z50

RESISTORS

	All Resistors	RS1/10S□□□ J

OTHERS

	CN531 3P KR CONNECTOR	B3B-PH-K-S

M STBY ASSY

SEMICONDUCTORS

	Q511	PDTA124EK
	D511	BR3365S

RESISTORS

	All Resistors	RS1/10S□□□ J

OTHERS

	CN511 3P KR CONNECTOR	S3B-PH-K-S

N DRSB ASSY

SWITCHES

	S541,S542	DSG1017

RESISTORS

	All Resistors	RS1/10S□□□ J

Mark	No.	Description	Part No.

O DRMB ASSY

This Assy has no service part.

P VOUT ASSY

SEMICONDUCTORS

	IC602-IC607	MC14577CF
	IC601	TA7302P
	Q607	2SA1037K
	Q605,Q606,Q608,Q613-Q615	2SC2412K
	Q610,Q612	PDTA124EK
	Q603,Q604	PDTA143EK
	Q609,Q611	PDTC124EK
	Q601,Q602	PDTC143EK
	D601,D602,D660	1SS355

COILS

	L601,L602	LAU470J

CAPACITORS

	C649	CCSQCH100D50
	C618	CCSQCH102J50
	C605,C622	CCSQCH390J50
	C621	CCSQCJ3R0C50
	C616,C635,C643,C647	CEAT100M50
	C601,C603,C612,C614,C627	CEAT470M16
	C629,C660	CEAT470M16
	C606-C611,C631,C632	CKSQYB103K50
	C602,C604,C613,C615	CKSQYF104Z25
	C619,C620,C623,C624,C628	CKSQYF104Z25
	C630,C636,C637,C640,C641	CKSQYF104Z25
	C644,C645,C661-C663	CKSQYF104Z25

RESISTORS

	R620,R621	RN1/10SE1001D
	R617,R618	RN1/10SE2201D
	R614,R622,R635,R637	RS1/10S68R0F
	R639,R640,R643,R645,R647	RS1/10S68R0F
	R651,R655	RS1/10S68R0F
	Other Resistors	RS1/10S□□□ J

OTHERS

	JA604,JA605 JACK	RKN1004
	JA603 3P PIN JACK	VKB1100
	JA601 2P PIN JACK	VKB1101
	JA602 S-TERMINAL SOCKET	VKN1446
	CN603 7P FFC CONNECTOR	VKN1267
	CN602 9P FFC CONNECTOR	VKN1269
	CN601 19P FFC CONNECTOR	VKN1279
	KN601 EARTH METAL FITTING	VNF1084
	KN602 EARTH METAL FITTING	VNF1084
	SCREW PLATE	VNE1948

Mark	No.	Description	Part No.

Q DOUT ASSY

SEMICONDUCTORS

	IC751,IC761		TC74HCU04AF
	IC771		TC7WU04F

COILS AND FILTERS

	F751,F761,F771,F775	(CHIP BEADS)	DTF1070
	L755,L765	(PULSE TRANSFORMER)	PTL1003

CAPACITORS

	C754,C764		CCSQCH101J50
	C753,C763		CEBA470M10
	C752,C755,C762,C765		CKSQYF103Z50
	C751,C761,C771,C775		CKSQYF104Z25
	C701,C756,C766,C776	(100µF/10V)	VCH1100

RESISTORS

	All Resistors		RS1/10S□□□ J

OTHERS

	JA771	OPTICAL LINK OUT	GP1F32T
	JA751	1P PIN JACK	PKB1004
	JA761	JACK	VKB1076
		SCREW PLATE	VNE1948

R AUDIO ASSY

SEMICONDUCTORS

⚠	IC361,IC381		ICP-N25
⚠	IC352,IC372		ICP-N38
	IC351,IC371		NJM4580L
	IC182,IC202		NJM4580M
	IC302,IC303,IC332,IC333		NJM5532DD
	IC131,IC141		NJU6322KE
	IC301,IC331		PCM1702P-J
	IC101		PD0236AD
	IC111		PD7009B
	IC151		PST994C
	IC121		TC74HC153AF
	IC181,IC201		TC74HC163AF
	IC171,IC191,IC221		TC74HC164AF
	IC211		TC7S08F
	IC222		TC7W00F
⚠	Q151,Q371,Q373,Q381		2SA1037K
⚠	Q372,Q382		2SA1262
⚠	Q351,Q361		2SC2412K
⚠	Q352,Q362		2SC3179
⚠	Q153		2SD1858X
	Q376		PDTA124EK
	Q374,Q375		PDTC124EK
⚠	D391,D392,D397,D398		30DF2-FC5
⚠	D393-D396		30DF2-FC6
	D301,D331		MA111
	D361,D381		UDZ3.6B
	D351,D352,D371,D372		UDZS5.6B

RELAY

	RY301,RY331		RSR1026

COILS AND FILTERS

⚠	F133,F143	(CHIP BEAD)	DTF1069
	F171,F112,F121,F131	(CHIP BEAD)	DTF1070
	F141,F181,F191,F201		DTF1070
	F211,F221,F222		DTF1070
	L301,L302,L331,L332	(FERRITE BEAD)	VTH1020

CAPACITORS

	C114		CCSQCH102J50
	C141		CCSQCH120J50
	C142		CCSQCH150J50
	C132		CCSQCH270J50
	C309,C316,C339,C346		CCSQCH391J50
	C131		CCSQCH8R0D50
	C101,C115,C122,C134		CEBA101M16
	C144,C145		CEBA101M16
	C352,C355,C362,C365,C372		CEBA101M25
	C375,C382,C385		CEBA101M25
	C301,C302,C305,C307		CEBA470M63
	C331,C332,C335,C337		CEBA470M63
	C311,C312,C318,C319		CEGA101M50
	C341,C342,C348,C349		CEGA101M50
	C303,C304,C306,C333,C334		CEGA470M35
	C336		CEGA470M35
	C354,C364,C374,C384		CEGA4R7M50
	C357,C358,C377,C378		CEZA1R0M50
	C308,C338		CKCYB102K50
	C359,C379		CKSQYF103Z50
	C102,C111,C116,C121,C133		CKSQYF104Z25
	C143,C151,C152,C171,C181		CKSQYF104Z25
	C188,C189,C191,C201		CKSQYF104Z25
	C207,C208,C211,C221,C222		CKSQYF104Z25
	C393,C394		CKSQYF225Z16
	C391,C392		CKSYF225Z25
	C353,C363,C373,C383		CMA101J2H
	C314,C344	(0.00082µF)	VCE1029
	C315,C345	(3000pF)	VCE1033
	C313,C343	(220pF)	VCE1034
	C351,C371	(2200µF/50V)	VCH1160
	C356,C366,C376,C386	(220µF/50V)	VCH1161
	VC131	(20pF)	DCM1005

RESISTORS

	R318,R348		RDR1/2PM104J
	R315,R345		RDR1/2PM122J
	R314,R344		RDR1/2PM222J
	R312,R342		RDR1/2PM242J
	R311,R341		RDR1/2PM272J
	R319,R320,R349,R350		RDR1/2PM471J

Mark	No.	Description	Part No.
	R359,R379		RDR1/4PM8R2J
	Other Resistors		RS1/10S□□□ J

OTHERS

	CN101	13P KR CONNECTOR	B13B-PH-K-S
	CN351	4P VH CONNECTOR	B4P-VH
		SCREW	BBZ30P050FCC
	JA301	2P PIN JACK	VKB1095
	JA331	2P PIN JACK	VKB1096
	CN111	28P FFC CONNECTOR	VKN1204
	KN1	EARTH METAL FITTING	VNF1084
		BUS LINE PLATE B	VNF1113
		BUS LINE PLATE C	VNF1114
	X141	CRYSTAL RESONATOR (16.9344MHz)	VSS1123
	X131	CRYSTAL RESONATOR (18.432MHz)	VSS1124

S DIRB ASSY (DV-S9 only)

SEMICONDUCTORS

	IC861	CD0015AF
	IC821,IC901,IC902	TC74HC00AF
	IC831	TC74HC153AF
	IC811	TC74HC157AF
	IC906	TC74HCT32AF
	IC903,IC905	TC7W00F
	IC841	TC7W04F
	IC904	TC7W14F
	IC835	TC7W74F
	Q911	2PD601A

COILS AND FILTERS

	F811,F821,F831,F835,F841	DTF1070
	F861,F863,F901,F903	DTF1070

CAPACITORS

	C862	CCSQCH100D50
	C811,C821,C831,C835,C841	CKSQYF104Z25
	C861,C863,C864,C901-C903	CKSQYF104Z25
	C906,C907	CKSQYF104Z25
	C865,C866,C904,C905 (100µF/10V)	VCH1100
	C911 (47µF/16V)	VCH1131

RESISTORS

	All Resistors	RS1/10S□□□ J

OTHERS

	CN801,CN811 (13P CONNECTOR)	B13B-PH-K-S
	CN802,CN812 (28P CONNECTOR)	VKN1204

Mark	No.	Description	Part No.

T SYPS ASSY

SEMICONDUCTORS

⚠	IC303 (250mA)	AEK7002
⚠	IC102,IC201,IC203 (400mA)	AEK7004
⚠	IC103 (500mA)	AEK7005
⚠	IC101 (750mA)	AEK7007
⚠	IC301,IC302 (800mA)	AEK7008
⚠	IC202 (1.25A)	AEK7010
⚠	IC304 (125mA)	AEK7020
⚠	IC314,IC324 (200mA)	AEK7023
	IC401	BA4560F
	IC402	TC74HC4053AF
	Q111-Q113,Q211-Q213,Q313	2SA1037K
	Q321	2SA1037K
⚠	Q101-Q103,Q201-Q203,Q302	2SB1375
⚠	Q304	2SB1375
	Q121-Q123,Q221-Q223,Q311	2SC2412K
⚠	Q301,Q303	2SD2012
⚠	Q312	DTC124ES
	D101-D103,D201-D203,D301	1SS355
	D303,D313,D333,D343	1SS355
⚠	D503	D3SBA20/4103
	D323	HZS5C2
	D324	MTZJ33B
	D334	MTZJ6.2B
⚠	D501,D502	RBA-406B
⚠	D304,D314,D504	S5688G

COILS

	L304,L314,L324,L334	LAU1R0J

CAPACITORS

	C101-C103,C201-C203,C301	CCSQCH121J50
	C404	CEAL470M16
	C324	CEAT100M50
	C314	CEAT101M50
	C507,C517,C529,C530	CEAT1R0M50
	C403	CEAT470M16
	C401,C402	CEAT470M25
	C334	CEAT470M50
	C527,C528	CEAT682M25
	C111-C113,C211-C213,C311	CEHAQ101M10
	C323,C343	CEHAQ101M10
	C304	CEHAQ101M50
	C531	CEHAQ102M25
	C121-C123,C321	CEHAQ471M10
	C221-C223	CEHAQ471M6R3
	C501,C511,C521,C522	CKPUYF223Z25
	C303,C313	CKSQYB102K50
	C411-C415	CKSQYF104Z25
	C344,C354	CKSQYF223Z50
	C506 (22000µF/25V)	VCH1159

Mark	No.	Description	Part No.
	C516	(33000µF/10V)	VCH1162

RESISTORS

	R301,R302,R314	RD1/4PU102J
	R324	RD1/4PU103J
	R101	RD1/4PU221J
	R102,R103,R201,R203	RD1/4PU331J
	R501,R502	RD1/4PU331J
	R304	RD1/4PU472J
	R503	RD1/4PU8R2J
	R401,R403	RN1/10SE1002D
	R414	RN1/10SE1801D
	R415	RN1/10SE3301D
	R202	RS1LMF330J
	R313,R333	RS1LMF331J
	R312	RS1LMF391J
	Other Resistors	RS1/10S□□□ J

OTHERS

CN34	10P FFC CONNECTOR	52045-1045
H10-H12,H5-H9	(FUSE CLIP)	AKR1003
	HEAT SINK	ANH7045
CN32	7P KR CONNECTOR	S7B-PH-K-S
	PCB BINDER	VEF1040
	HEAT SINK	VNE1921
KN31	EARTH METAL FITTING	VNF1084

■ SYOUT ASSY

OTHERS

	PC BOARD (SYOUT)	VNP1636

■ FLAUD ASSY

OTHERS

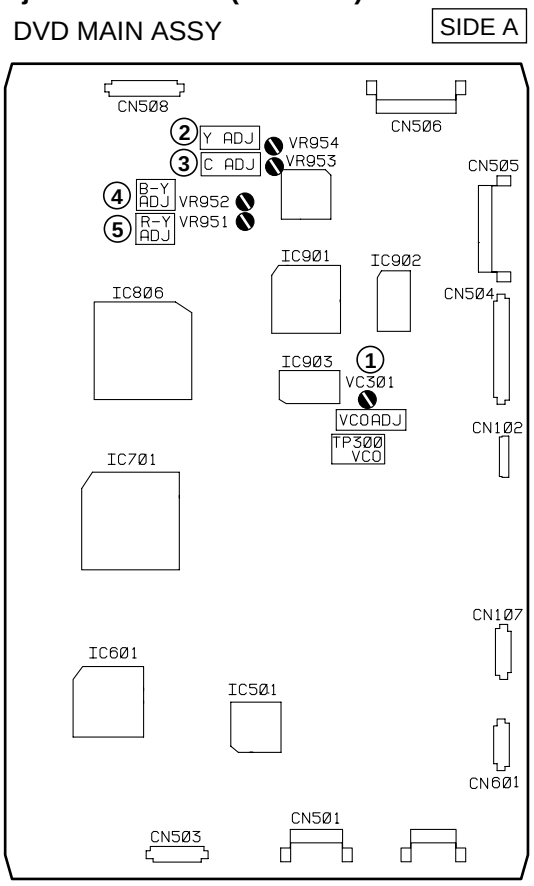
	PC BOARD (FLAUD)	VNP1637

6. ADJUSTMENT

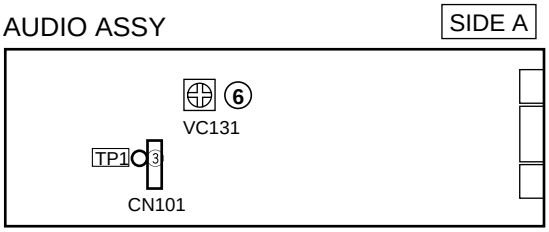
6.1 ADJUSTMENT ITEMS AND LOCATION

■Adjustment Points (PCB Part)

DVD MAIN ASSY



AUDIO ASSY



■Adjustment Items

[Mechanical Part]

❶ Tangential Skew and Radial Skew Coarse Adjustment

❷ DVD Jitter Adjustment

[Electrical Part]

① VCO Offset Adjustment

② Y Level Adjustment

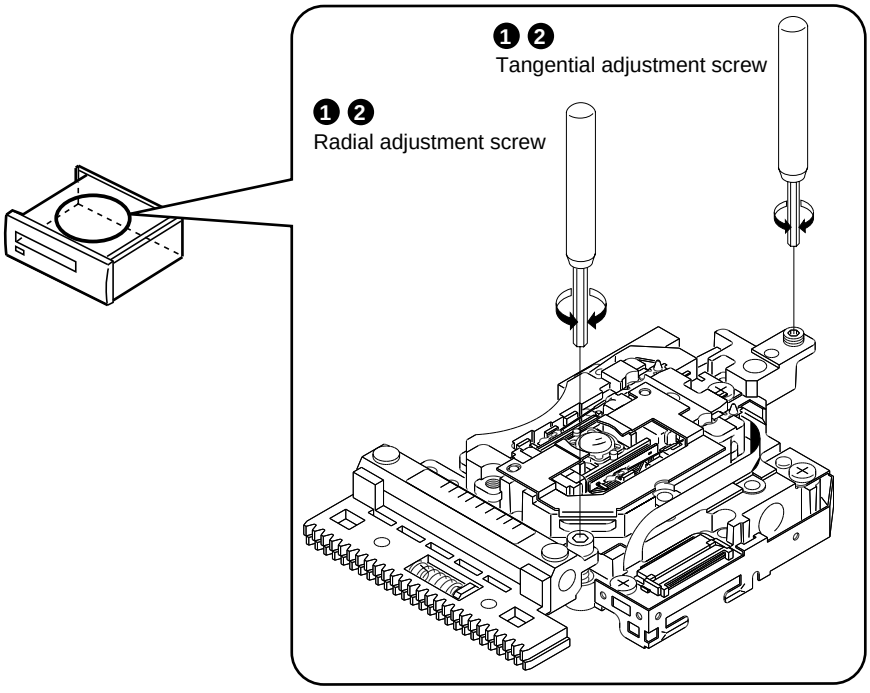
③ C Level Adjustment

④ Cb Level Adjustment

⑤ Cr Level Adjustment

⑥ 18MHz Master Clock Adjustment

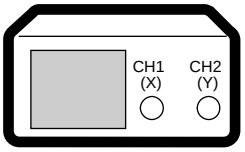
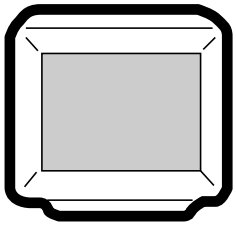
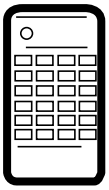
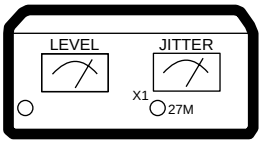
■Adjustment Points (Mechanism Part)



Note 1:
Remove the tray when adjusting the tangential and radial adjustment screws.

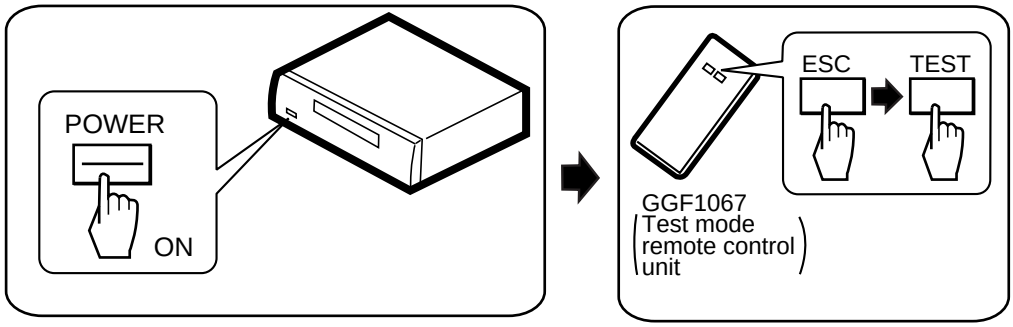
Note 2:
After the adjustment, stabilize the screw with an adhesive.

6.2 JIGS AND MEASURING INSTRUMENTS

CD test disc (ABEX-784)	DVD test disc (DVD-MJK1)	⊖ Screwdriver (medium)	⊖ Screwdriver (small)
⊖ Precise screwdriver	⊕ Screwdriver (large)	⊕ Screwdriver (medium)	 Dual-trace oscilloscope (with delay) Frequency band ≧ 40MHz
Frequency counter Display digit ≧ 8-digit	 TV monitor	 Test mode remote control unit (GGF1067)	Hexagonal screwdriver
 Jitter Meter	Equalizer Unit		

6.3 TEST MODE

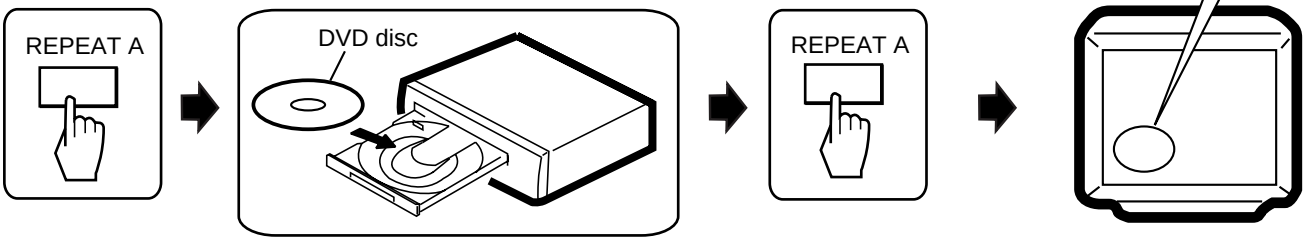
TEST MODE: ON



TEST MODE: DISC SET

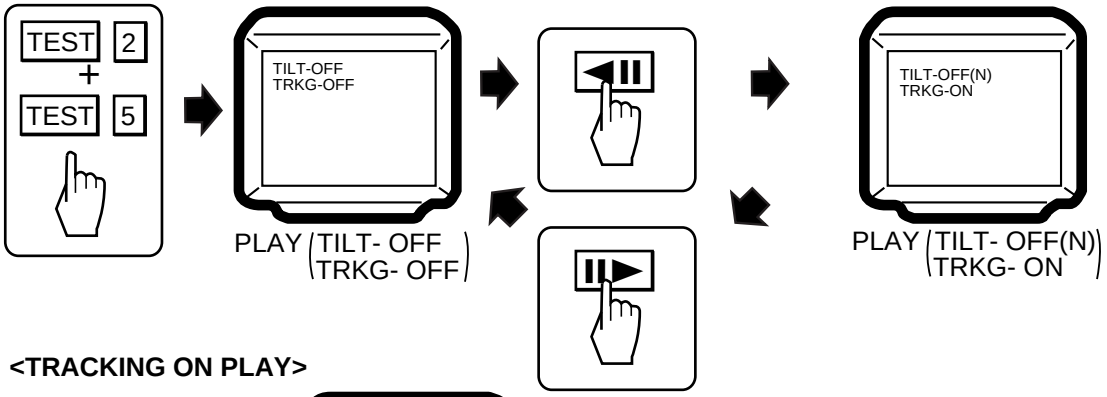
- **With TRAY**

<TRAY OPEN>

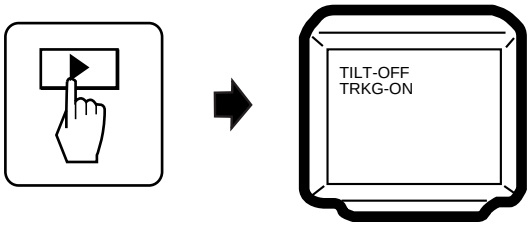


TEST MODE: PLAY

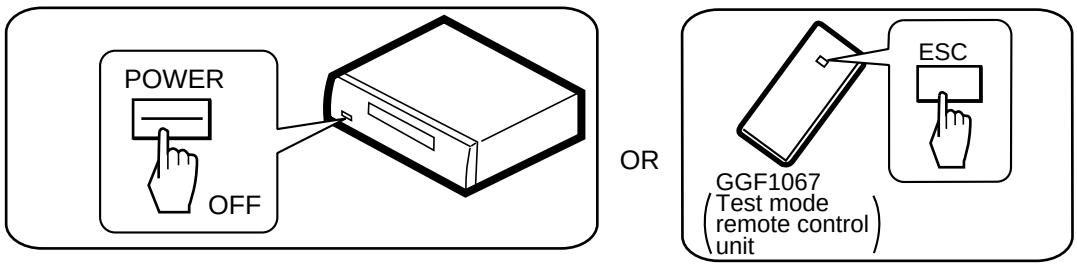
<TRACKING OFF PLAY>



<TRACKING ON PLAY>



TEST MODE: OFF

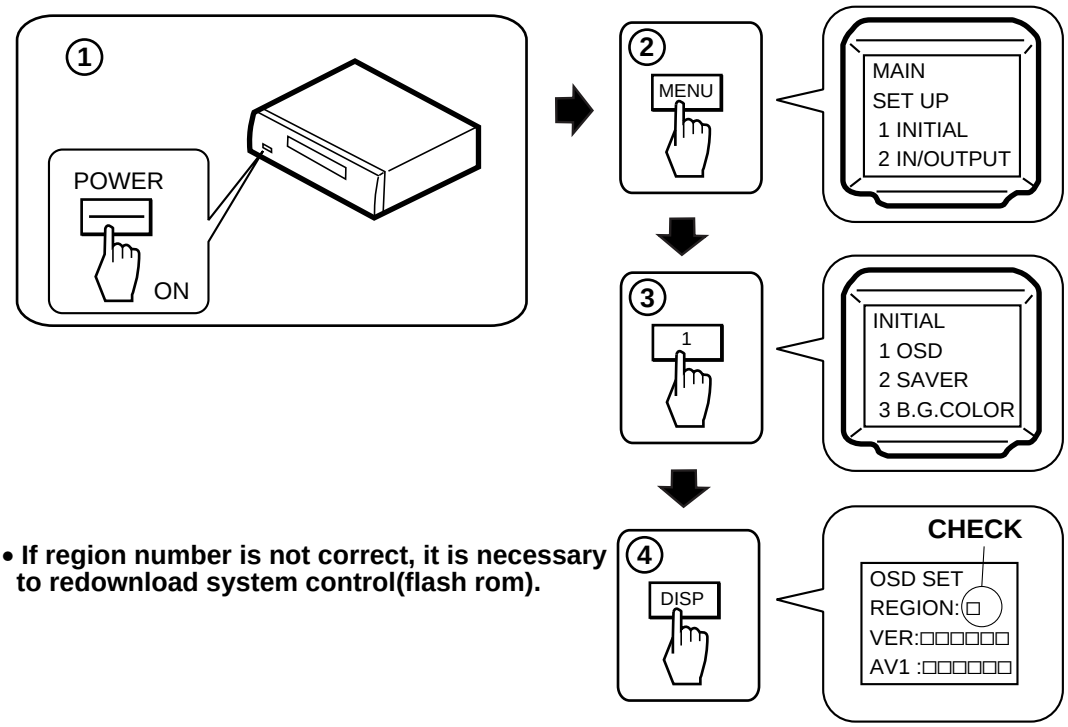


6.4 NECESSARY ADJUSTMENT POINTS

When	Adjustment Points	
■ EXCHANGE MECHANISM ASSY PARTS		
Exchange pickup	Mechanical point	❶,❷
	Electric point	———
Exchange spindle motor	Mechanical point	———
	Electric point	———
■ EXCHANGE PCB ASSY		
Exchange board DVD MAIN ASSY	Mechanical point	———
	Electric point	———
	Note : ①,②,③,④ and ⑤ are adjusted already.	
Exchange board AUDIO ASSY	Mechanical point	———
	Electric point	———
	Note : ⑥ is adjusted already.	

6.5 REGION NUMBER CHECK

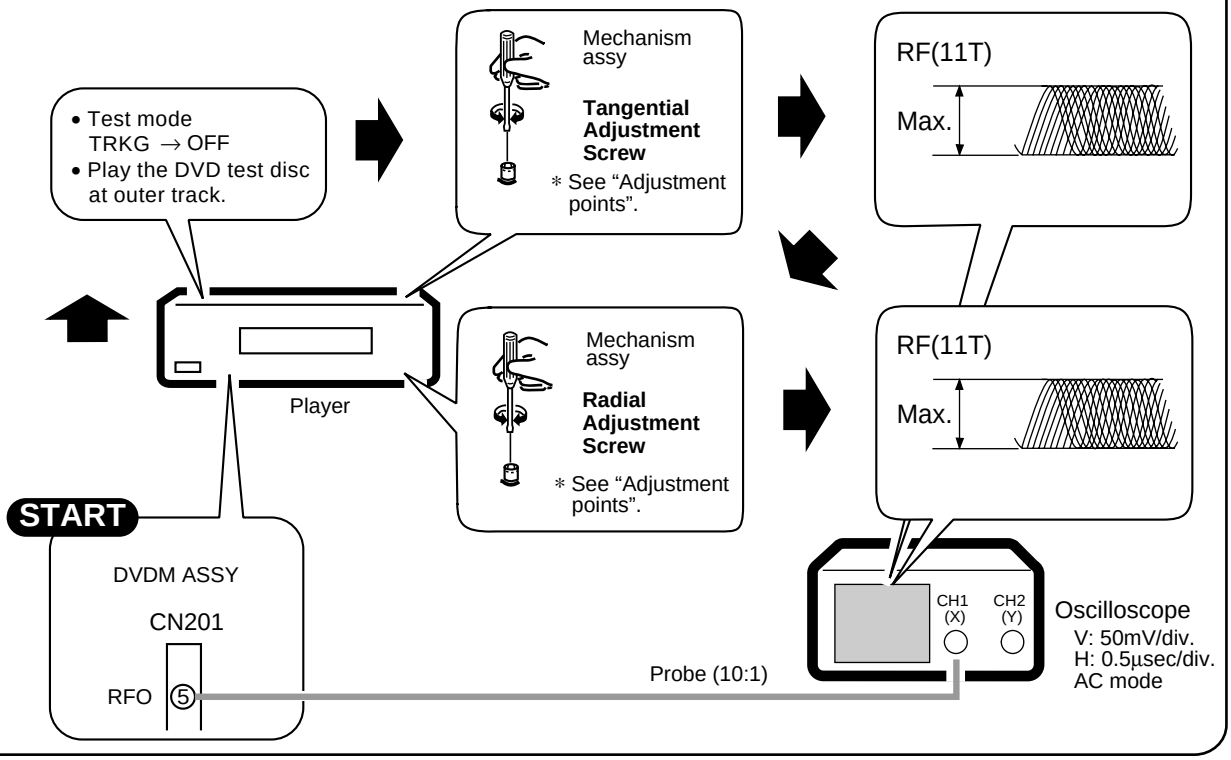
- **Perform this operation after confirming the region number of each destination on the cover.**



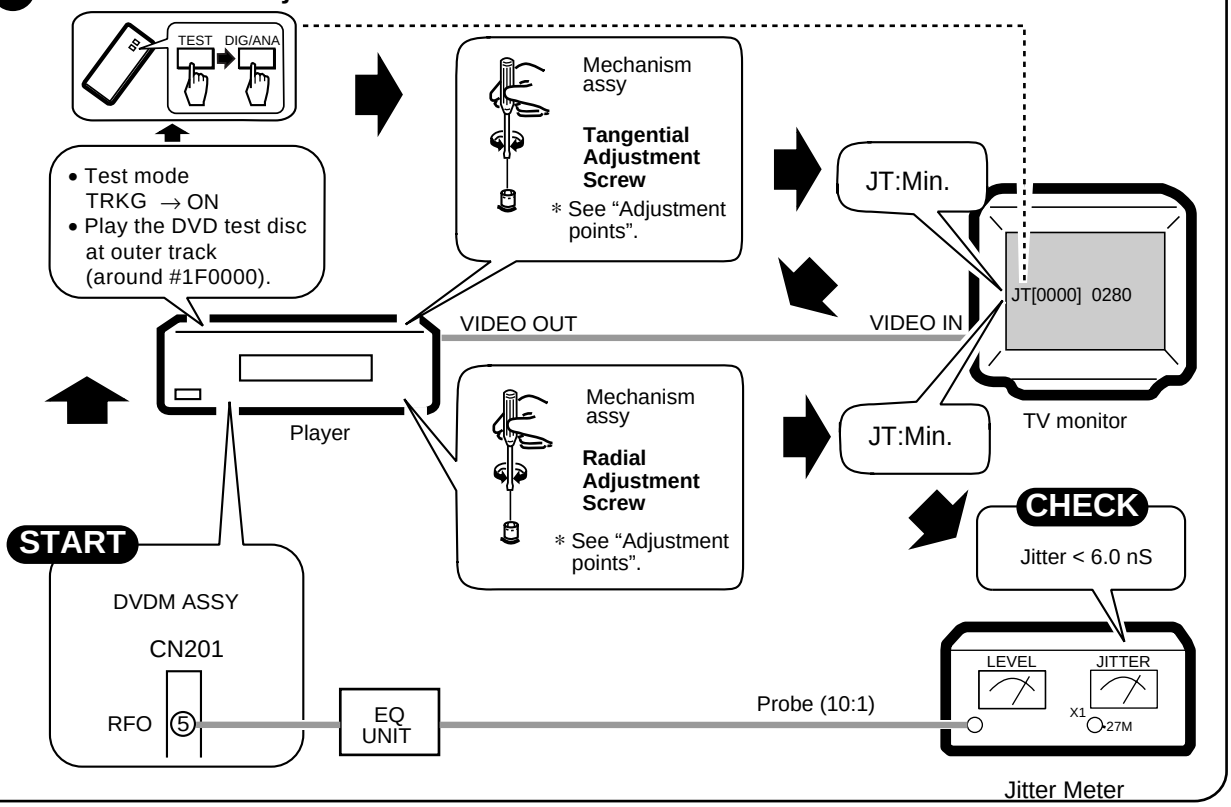
- **If region number is not correct, it is necessary to redownload system control(flash rom).**

6.6 MECHANICAL ADJUSTMENT

1 Tangential Skew and Radial Skew Coarse Adjustment

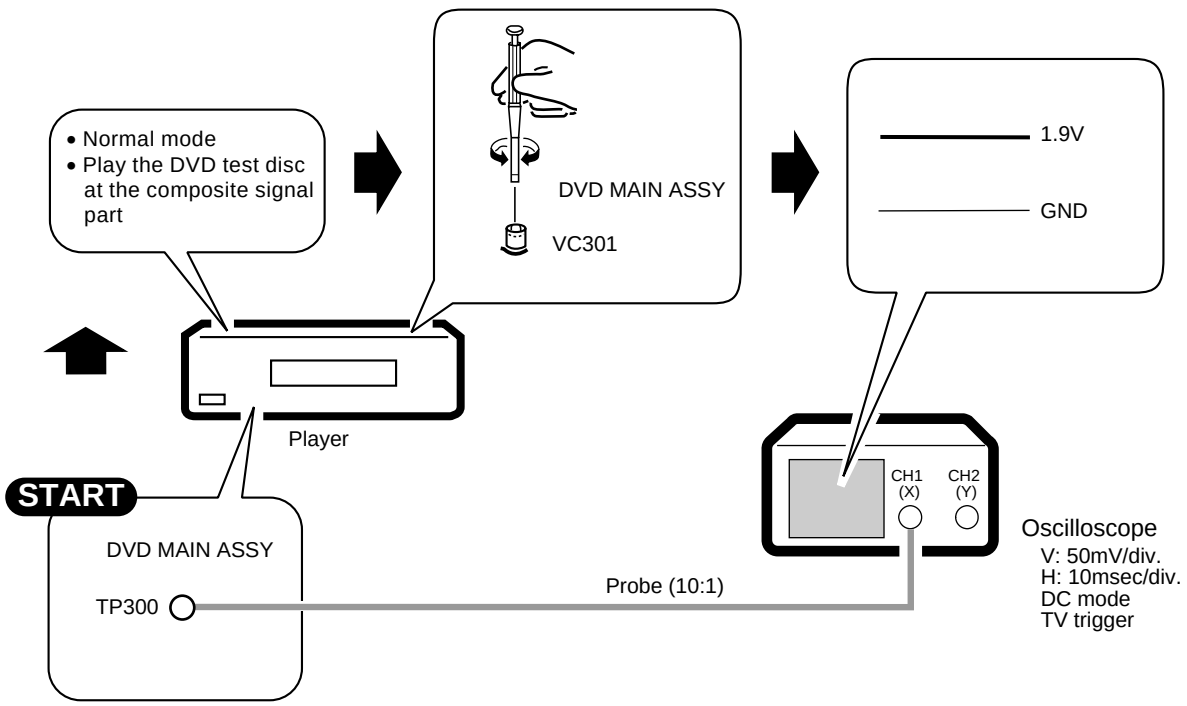


2 DVD Jitter Adjustment

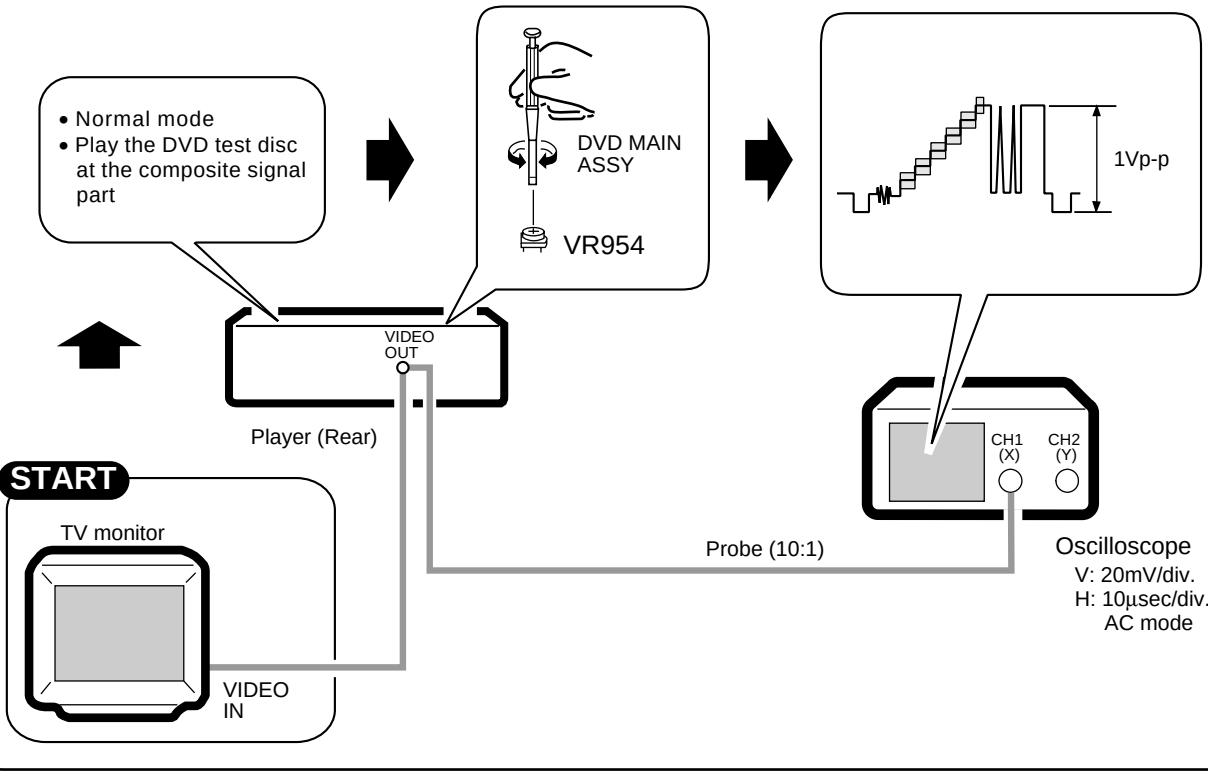


6.7 ELECTRICAL ADJUSTMENT

① VCO Offset Adjustment

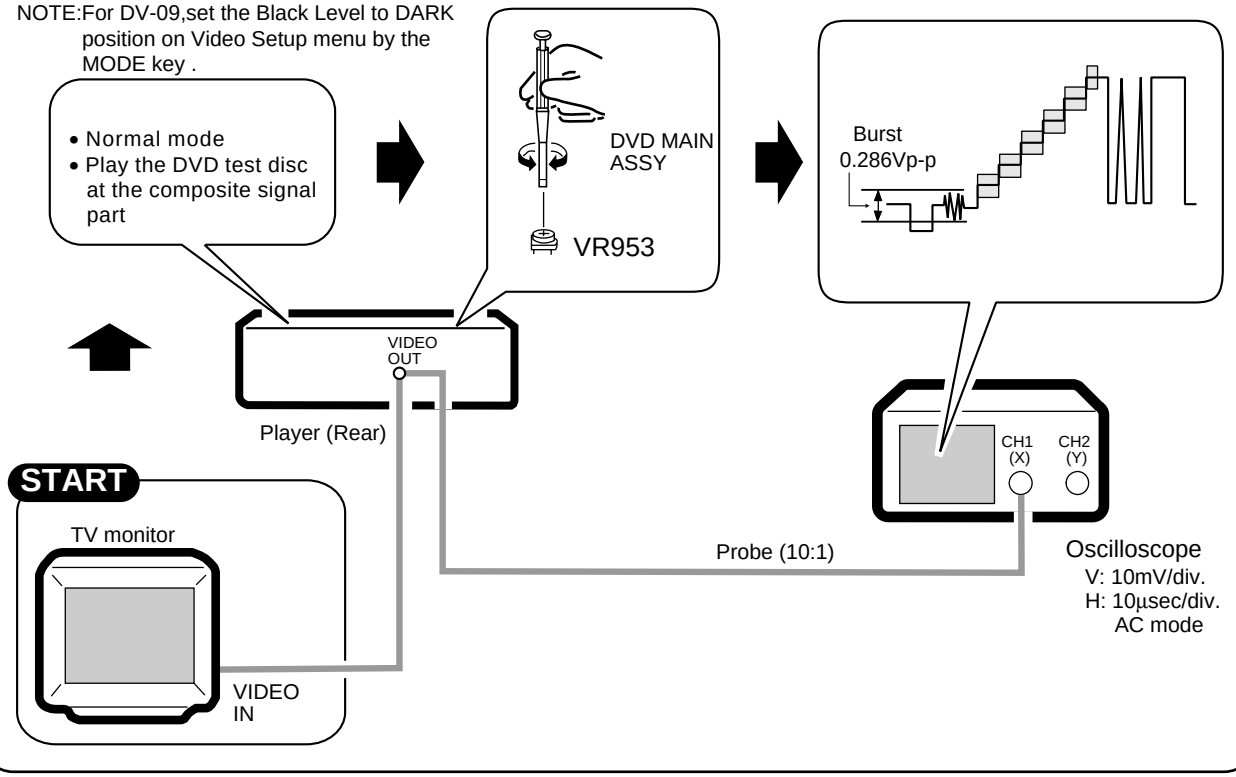


② Y Level Adjustment

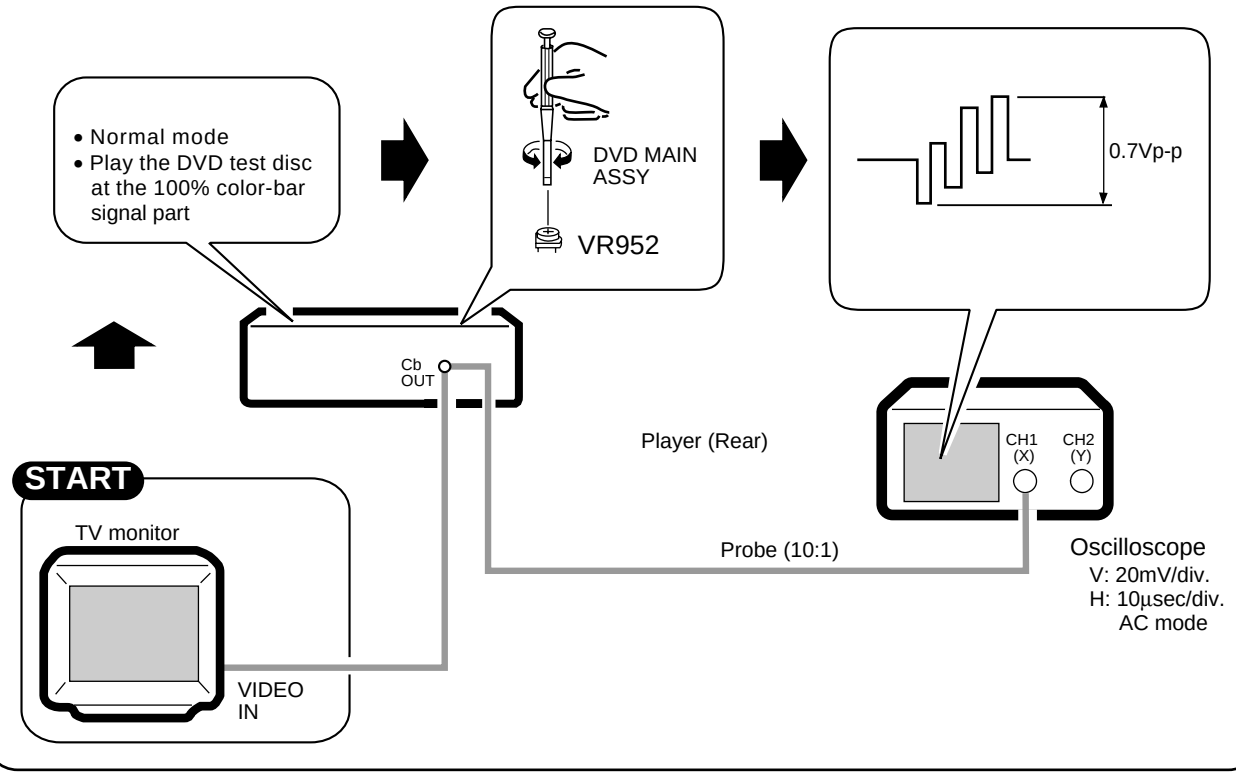


③ C Level Adjustment

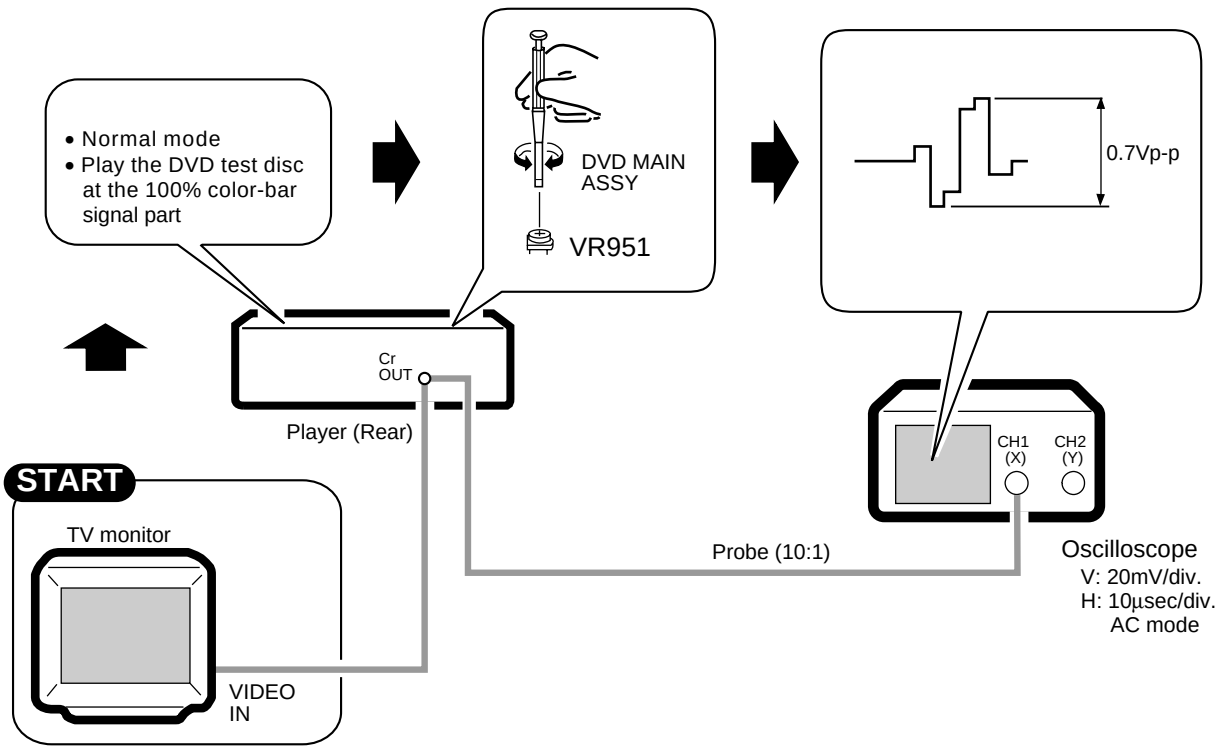
NOTE:For DV-09,set the Black Level to DARK position on Video Setup menu by the MODE key .



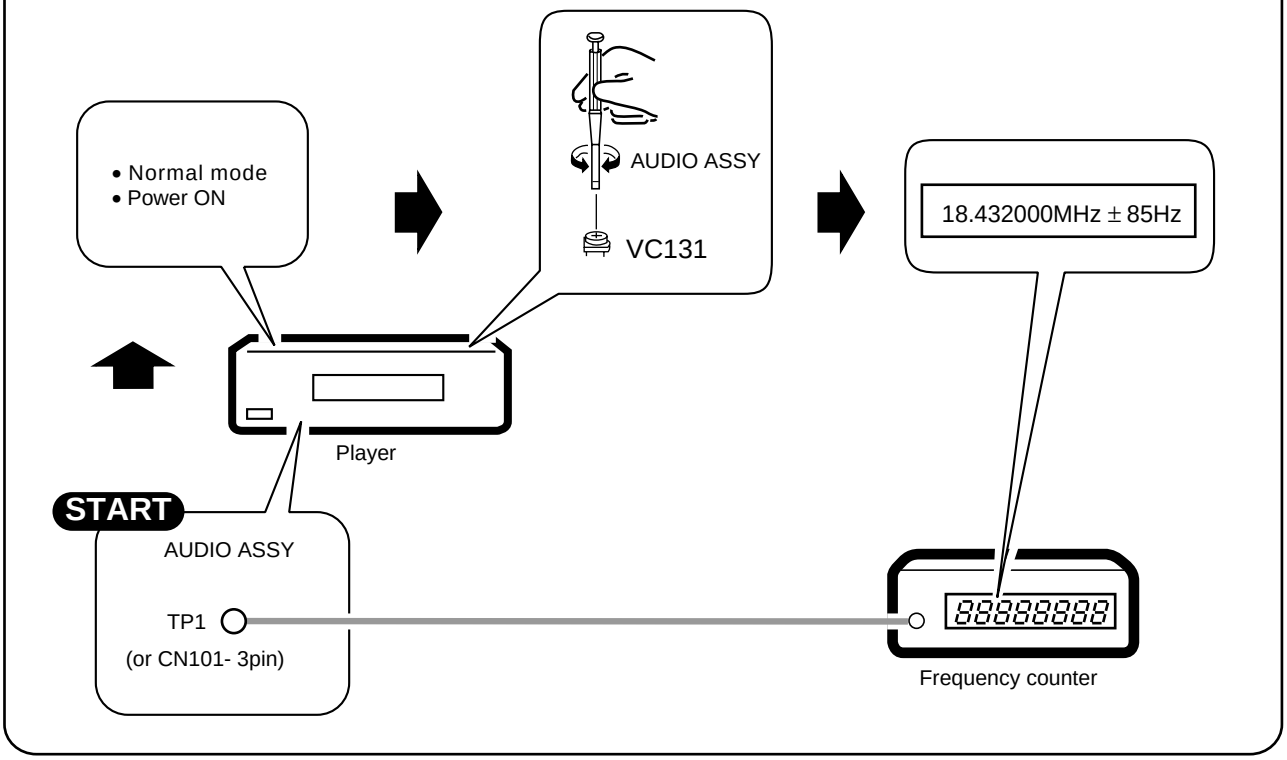
④ Cb Level Adjustment



5 Cr Level Adjustment

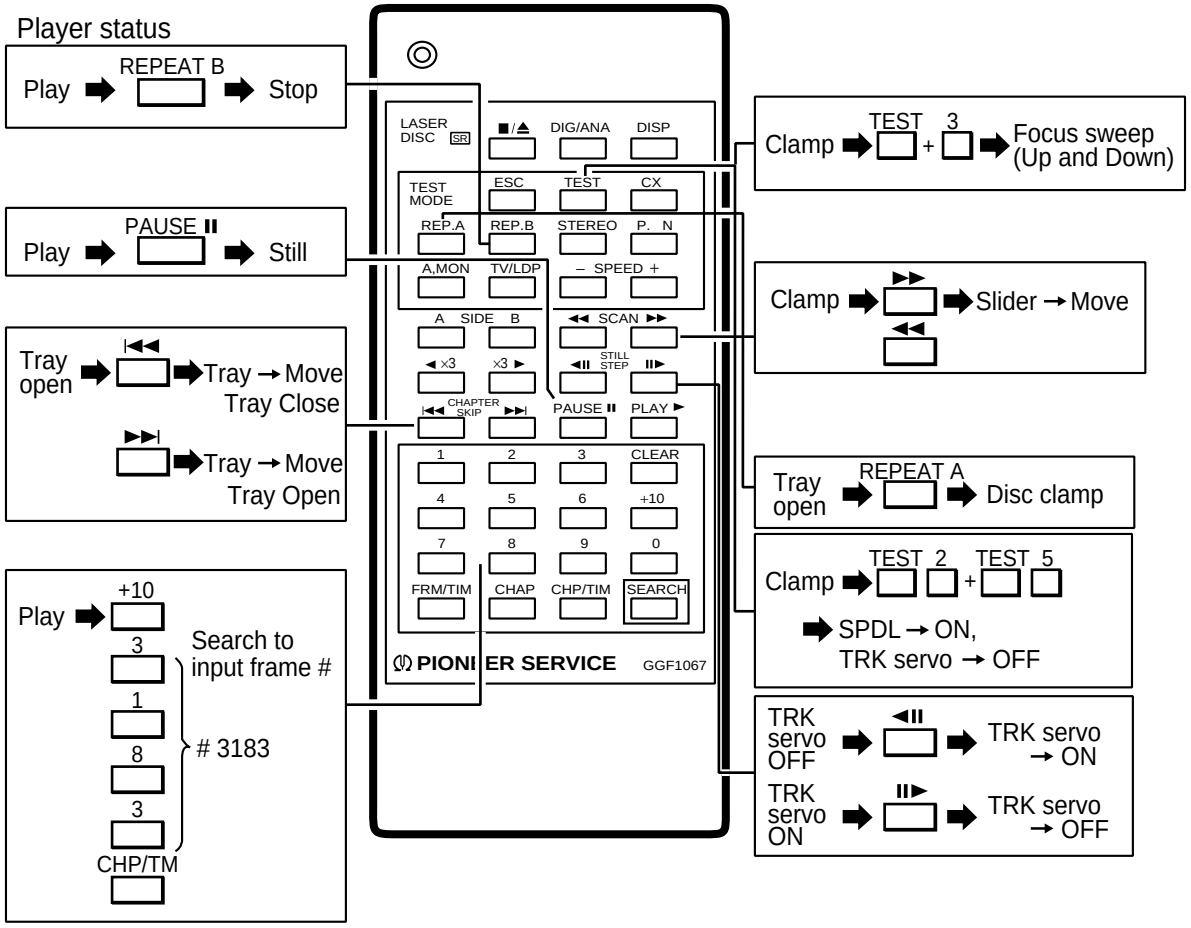


6 18 MHz Master Clock Adjustment

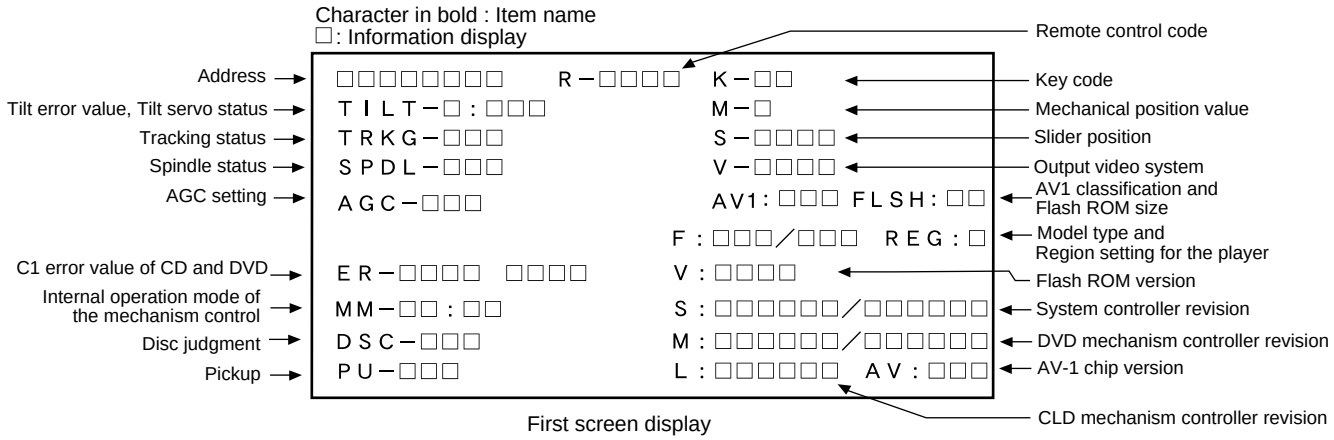


6.8 OPERATIONS IN THE TEST MODE

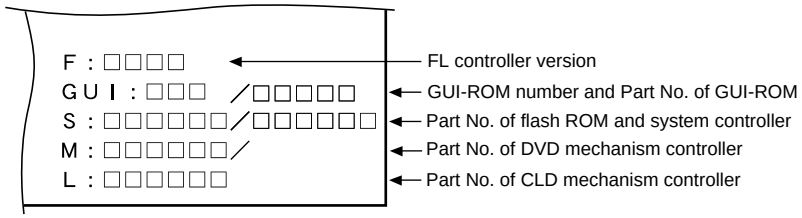
■ Test Mode Remote Control Unit (GGF1067)



■ TV Monitor Display


Character in bold : Item name
□: Information display
Remote control code
Address → □□□□□□□□ R−□□□□
Key code ← K−□□
Tilt error value, Tilt servo status → TILT−□ : □□□
Mechanical position value ← M−□
Tracking status → TRKG−□□□
Slider position ← S−□□□□
Spindle status → SPDL−□□□
Output video system ← V−□□□□
AGC setting → AGC−□□□
AV1 classification and Flash ROM size ← AV1: □□□ FLSH: □□
Model type and Region setting for the player ← F : □□□/□□□ REG : □
C1 error value of CD and DVD → ER−□□□□ □□□□
Flash ROM version ← V : □□□□
Internal operation mode of the mechanism control → MM−□□ : □□
System controller revision ← S : □□□□□□/□□□□□□
Disc judgment → DSC−□□□
DVD mechanism controller revision ← M : □□□□□□/□□□□□□
Pickup → PU−□□□
AV-1 chip version ← L : □□□□□□ AV : □□□
CLD mechanism controller revision
First screen display

Note : Switch the first and second screen by pressing the [DISPLAY] key on the remote control unit.


F : □□□□
FL controller version ←
GUI : □□□ /□□□□□
GUI-ROM number and Part No. of GUI-ROM ←
S : □□□□□□/□□□□□□
Part No. of flash ROM and system controller ←
M : □□□□□□/
Part No. of DVD mechanism controller ←
L : □□□□□□
Part No. of CLD mechanism controller ←

Second screen display (at lower right portion of the screen)

7. GENERAL INFORMATION

7.1 PARTS

7.1.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PD0259A (DVD MAIN ASSY : IC901)

● **DNR IC**

● **Pin Function**

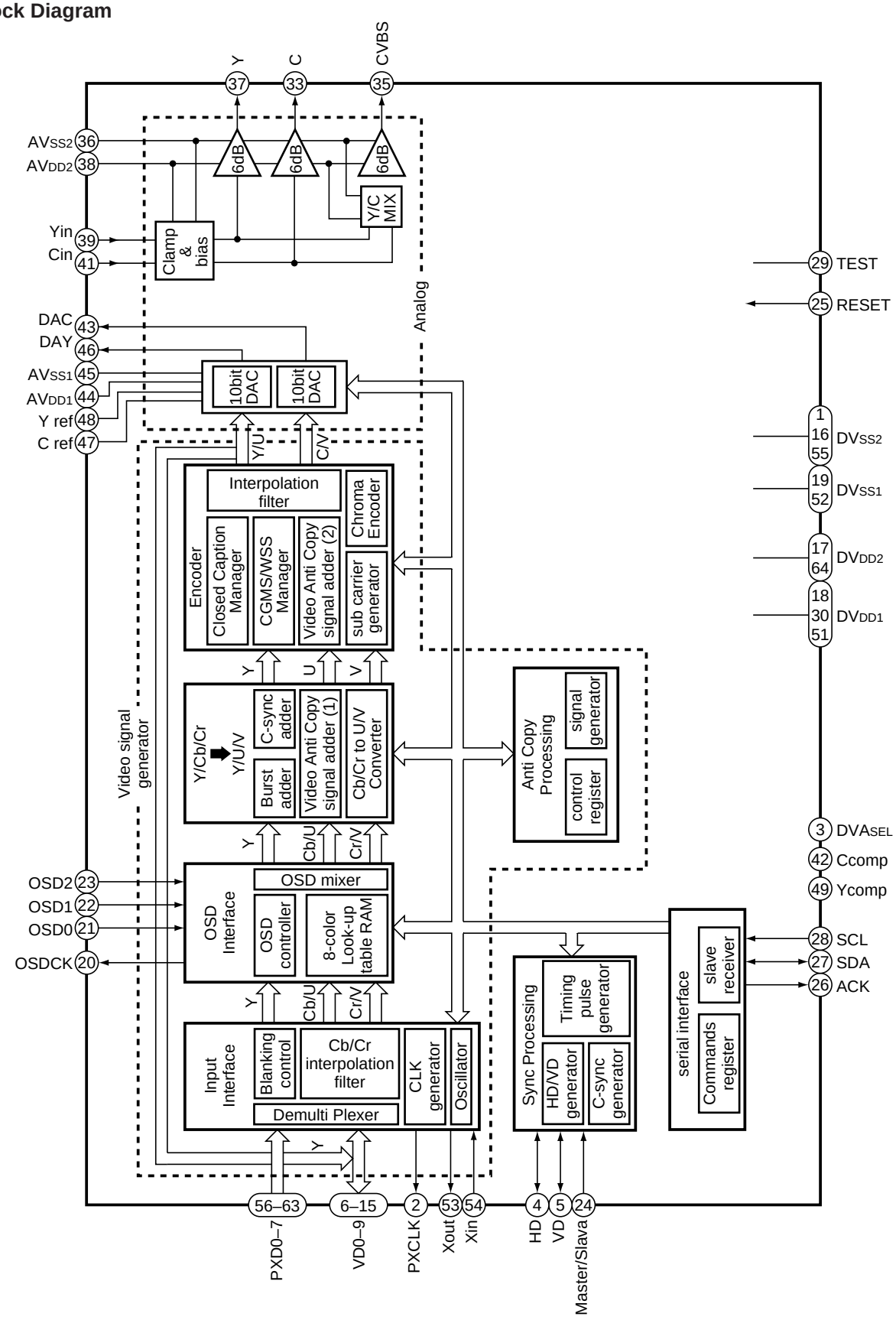
No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	GNDO	-	Ground pin for output	37	GNDO	-	Ground pin for output
2	VDDO	-	Power supply pin : 3.3V	38	VDDO	-	Power supply pin : 3.3V
3	VI [7]	I	Video data input: MSB	39	TIO [7]	I/O	Input/Output pin for test
4	VI [6]	I	Video data input	40	TIO [6]		
5	VI [5]			41	TIO [5]		
6	VI [4]			42	TIO [4]		
7	VI [3]			43	TIO [3]		
8	VI [2]			44	TIO [2]		
9	VI [1]			45	TIO [1]		
10	VI [0]	I	Video data input : LSB	46	TIO [0]		
11	GNDI	-	Ground pin for internal core input	47	GNDO	-	Ground pin for output
12	TSTMODE	I	Setting pin for test mode	48	CDATA [15]	I/O	DRAM data bus (for C signal) : MSB of CR
13	XHSYNCI	I	Horizontal synchronising signal input	49	CDATA [0]	I/O	DRAM data bus (for C signal) : LSB of CB
14	XVSYNCI	I	Vertical synchronising signal input	50	CDATA [14]	I/O	DRAM data bus (for C signal)
15	FIELDI	I	Field flag input Odd-Field : "L" Even-Field : "H"	51	CDATA [1]		
16	GNDI	-	Ground pin for internal core input	52	CDATA [13]		
17	CLK27I	I	27MHz clock input	53	CDATA [2]		
18	VDDI	-	Power supply pin for internal core input : 3.3V	54	VDDO	-	Power supply pin for output : 3.3V
19	GNDI	-	Ground pin for internal core input	55	GNDO	-	Ground pin for output
20	TI [1]	I	Intput pin for test	56	CDATA [12]	I/O	DRAM data bus (for C signal)
21	TI [0]			57	CDATA [3]		
22	RMA [3]	I	Resistor address input for monitor:MSB	58	CDATA [11]		
23	RMA [2]	I	Resistor address input for monitor	59	CDATA [4]		
24	RMA [1]			60	CDATA [10]		
25	RMA [0]	I	Resistor address input for monitor : LSB	61	VDDI	-	Power supply pin for internal core input : 3.3V
26	YNRMODE	I	H : only YNR mode / L : normal mode	62	GNDI	-	Ground pin for internal core input
27	SLMODE	I	Latch timing setting pin for V latch resistor	63	CDATA [5]	I/O	DRAM data bus (for C signal)
28	MODE_X	I	H:set normal setting to resistor forcedly L : normal (normal value "L")	64	CDATA [9]		
29	SRN	I	System reset input pin (negative)	65	CDATA [6]		
30	VDDI5	-	Power supply pin for input level shifter :5V	66	GNDO	-	Ground pin for output
31	GNDI	-	Ground pin for input level shifter	67	VDDO	-	Power supply pin for output : 3.3V
32	CSB	I	MPU Serial interface chip select input with 5V to 3.3V level shifter	68	CDATA [8]	I/O	DRAM data bus (for C signal) : LSB of CB
33	SCLK	I	MPU Serial interface clock input with 5V to 3.3V level shifter	69	CDATA [7]	I/O	DRAM data bus (for C signal) : MSB of CR
34	SDATA	I	MPU Serial interface data input with 5V to 3.3V level shifter	70	ADRS [4]	O	DRAM address signal output
35	VDDI	-	Power supply pin for input level shifter :3.3V	71	ADRS [3]		
36	GNDI5	-	Ground pin for input level shifter	72	ADRS [5]		

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
73	GNDO	-	Ground pin for output	109	GNDO	-	Ground pin for output
74	ADRS [2]	O	DRAM address signal output	110	FIELDO	I/O	Field flag output Output Odd-Field :L,Even-Field :H at the top of NTSC : LINE4, 266 /PAL:LINE1,313 for change timing .
75	ADRS [6]			111	XVSYNCO	I/O	Vertical synchronising signal output
76	ADRS [1]			112	XHSYNCO	I/O	Horizontal synchronising signal output
77	ADRS [7]			113	REBSELO	I/O	Cr flag output When output video data VO [7:0] is Cr and output next Y data ,output "H" . Otherwise "L"
78	ADRS [0]	O	DRAM address signal output : LSB of CB	114	VDDO	-	Power supply pin for output :3.3V
79	ADRS [8]	O	DRAM address signal output : MSB	115	GNDO	-	Ground pin for output
80	VDDO	-	Power supply pin : 3.3V	116	VO [0]	I/O	Video data output : LSB
81	GNDO	-	Ground pin for output	117	VO [1]	I/O	Video data output
82	RASB	O	DRAM row-address strobe signal output	118	VO [2]		
83	OEB	O	DRAM output-enable signal output	119	VO [3]		
84	WEB	O	DRAM write-enable signal output	120	VO [4]		
85	CASB	O	DRAM column-address strobe signal output	121	VO [5]		
86	GNDO	-	Ground pin for output	122	VO [6]		
87	YDATA [7]	I/O	DRAM data bus (for Y signal) : MSB of previous Y	123	VO [7]	I/O	Video data output : MSB
88	YDATA [8]	I/O	DRAM data bus (for Y signal) : LSB of current Y	124	GNDO	-	Ground pin for output
89	YDATA [6]	I/O	DRAM data bus (for Y signal)	125	TO1	O	Output pin for test
90	VDDI	-	Power supply pin for internal core input : 3.3V	126	VDDO	-	Power supply pin for output :3.3V
91	GNDI	-	Ground pin for internal core input	127	GNDO	-	Ground pin for output
92	YDATA [9]	I/O	DRAM data bus (for Y signal)	128	CLK27O	O	27MHz clock output
93	YDATA [5]			129	GNDO	-	Ground pin for output
94	YDATA [10]			130	TO0	I/O	Output pin for test
95	YDATA [4]			131	GNDO	-	Ground pin for output
96	YDATA [11]			132	VDDO	-	Power supply pin for output :3.3V
97	GNDO	-	Ground pin for output	133	XCSYNCO	I/O	Complex synchronising signal output
98	VDDO	-	Power supply pin for output : 3.3V	134	DXBLK	I/O	Blanking output
99	YDATA [3]	I/O	DRAM data bus (for Y signal)	135	DXBF	I/O	Burst flag output
100	YDATA [12]			136	GNDO	-	Ground pin for output
101	YDATA [2]			137	RMO [7]	I/O	Resistor monitor output
102	YDATA [13]			138	RMO [6]		
103	YDATA [1]			139	RMO [5]		
104	YDATA [14]			140	RMO [4]		
105	YDATA [0]	I/O	DRAM data bus (for Y signal) : LSB of previous Y	141	RMO [3]	I/O	Resistor monitor /serial-parallel conversion output
106	YDATA [15]	I/O	DRAM data bus (for Y signal) : MSB of current Y	142	RMO [2]	I/O	Resistor monitor /serial-parallel conversion output (ANR)
107	VDDI	-	Power supply pin for internal core input : 3.3V	143	RMO [1]	I/O	Resistor monitor /serial-parallel conversion output (CUP)
108	GNDI	-	Ground pin for internal core input	144	RMO [0]	I/O	Resistor monitor /serial-parallel conversion output (DEXT)

■ M65677FP (DVD MAIN ASSY : IC951,IC952)

● Degital Video Encoder

● Block Diagram



● Pin Function

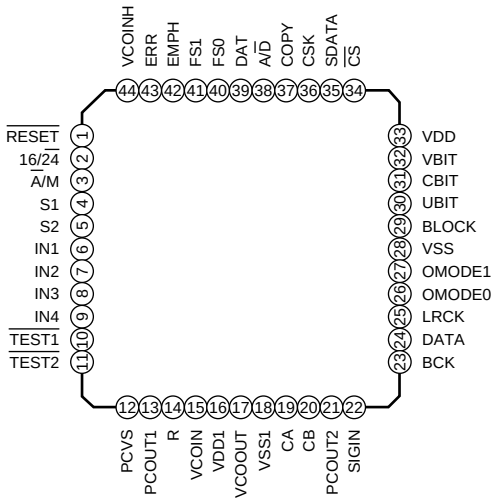
No.	Pin Name	I/O	Function
1	DVSS2	-	Ground pin for Digital (I/O part)
2	PXCLK	O	Reference clock for input Pixel data
3	DVASEL	I	I^2C slave address setting When slave address=40h,set to "Low" . When slave address=42h,set to "High"
4	HD	I/O	Horizontal synchronising signal output Input when CCIR601 slave, output when master mode , CCIR656 mode and power on
5	VD	I/O	Vertical synchronising signal output Input when CCIR601 slave, output when master mode , CCIR656 mode and initial state
6	VD9	I/O	When Y/C output : "L" When Y/U/V : 10 bit digital intensity signal(MSB) with composite sync. Initial: "L"
7	VD8	I/O	When Y/C output : "L" When Y/U/V : 10 bit digital intensity signal(MSB) with composite sync Initial: "L"
8	VD7		
9	VD6		
10	VD5		
11	VD4		
12	VD3		
13	VD2		
14	VD1		
15	VD0	I/O	When Y/C output : "L" When Y/U/V : 10 bit digital intensity signal(LSB) with composite sync Initial: "L"
16	DVSS2	-	Ground pin for Digital (I/O part)
17	DVDD2	-	Power supply pin for digital (I/O part)
18	DVDD1	-	Power supply pin for digital (inner logic part)
19	DVSS2	-	Ground pin for Digital (inner logic part)
20	OSDCK	O	Reference clock for external connection microcomputer Output clock requency is 13.5MHz or 6.25MHz. Exchanged output clock frequency by I2C bus.
21	OSD0	I	Color Look-up table address input MSB:OSD2 , LSB:OSD0. When not used OSD function,set all pins to "High"
22	OSD1		
23	OSD2		
24	Master/Slave	I	Synchronising mode setting Slave mode:"Low" , master mode:"High' , CCIR656 mode:"Low"
25	RESET	I	Initialise reset (active"Low")
26	ACK	O	Serial bus acknowledge output (received acknowledge:"High')
27	SDA	I/O	Serial bus data acknowledge pin
28	SCL	I	Serial bus clock input
29	TEST	I	For test
30	DVDD1	-	Power supply pin for digital (inner logic part)
31	N.C.	-	Not used (open)
32	N.C.		
33	C	O	Chroma signal output from 6dB amplifier. When 6dB amplifier input signal amplitude is 0.5Vp-p,chroma output standard amplitude is 1.0Vp-p.
34	N.C.	-	Not used (open)

No.	Pin Name	I/O	Function
35	CVBS	O	Analog composite video signal output from 6dB amplifier. Analog composite video standard amplitude is 1.24Vp-p.
36	AVSS2	-	Ground pin for analog (6dB amplifier part)
37	Y	O	Luminance signal(Y) input from 6dB amplifier. When 6dB amplifier input signal amplitude is 0.6Vp-p, luminance signal(Y) standard amplitude is 1.2Vp-p.
38	AVDD2	-	Power supply pin for analog (6dB amplifier part)
39	Yin	I	Luminance signal(Y) input from external LPF. Luminance signal(Y) standard amplitude is 0.6Vp-p.
40	N.C.	-	Not used (open)
41	Cin	I	Chroma signal(Y) input from external LPF. Chroma signal(Y) standard amplitude is 0.5Vp-p.
42	Ccomp	I	Phase compensation of DAC for chroma/V signal output
43	DAC	O	Chroma/V signal output
44	AVDD1	-	Power supply pin for analog (DAC part)
45	AVSS1	-	Ground pin for analog (DAC part)
46	DAY	O	Y/U signal output
47	Cref	I	Reference current of DAC for chroma/V signal output
48	Yref	I	Reference current of DAC for Y/U signal output
49	Ycomp	I	Phase compensation of DAC for Y/U signal output
50	N.C.	-	Not used (open)
51	DVDD1	-	Power supply pin for digital (inner logic part)
52	DVSS1	-	Ground pin for digital (inner logic part)
53	Xout	O	System clock output
54	Xin	I	System clock input (System clock requency is 27.0MHz only)
55	DVSS2	-	Ground pin for digital (I/O part)
56	PXD7	I	PIXEL data (MSB bit)
57	PXD6	I	PIXEL data
58	PXD5		
59	PXD4		
60	PXD3		
61	PXD2		
62	PXD1		
63	PXD0	I	PIXEL data (LSB bit)
64	DVDD2	-	Power supply pin for digital (I/O part)

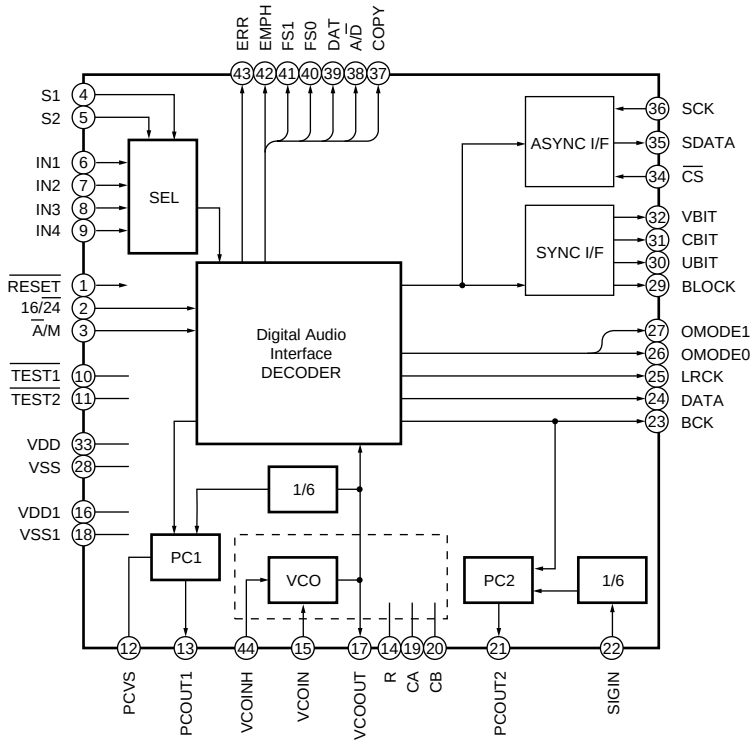
CD0015AF (DIRB ASSY : IC861)

● DIR

● Pin Layout



● Block Diagram



● Pin Function

No.	Pin Name	I/O	Function	No.	Pin Name	I/O	Function
1	$\overline{\text{RESET}}$	IS	Power ON reset input ("L": reset)	23	BCK	O	Demodulation data bit clock output (64fs)
2	16/$\overline{24}$	IT	Input format select pin with pull up resistor	24	DATA	O	Demodulated audio data output
3	$\overline{\text{A}}$/M			25	LRCK	O	Demodulation data LR clock output ("H":L)
4	S1	IT	Input select pin 1	26	OMODE0	O	Data output format select pin 0
5	S2	IT	Input select pin 2	27	OMODE1	O	Data output format select pin 1
6	IN1	IT	Data input pin 1	28	VSS	-	Ground pin for logic part
7	IN2	IT	Data input pin 2	29	BLOCK	O	Block start output pin
8	IN3	IT	Data input pin 3	30	UBIT	O	User data output pin
9	IN4	IT	Data input pin 4	31	CBIT	O	Channel status output pin
10	$\overline{\text{TEST1}}$	IT	Pin 1 for test (normal:"H" or open)	32	VBIT	O	Variditiy output pin
11	$\overline{\text{TEST2}}$	IT	Pin 2 for test (normal:"H" or open)	33	VDD	-	Power supply pin for logic part
12	PCVS	-	Input for VCO free run frequency setting	34	$\overline{\text{CS}}$	IT	Chip select input pin ("L":selected)
13	PCOUT1	-	Phase comparator output 1	35	SDATA	OT	Serial data output pin
14	R	-	Pin connected to resistor for VCO adjustment	36	SCK	IT	Serial clock input pin
15	VCOIN	-	VCO control voltage input	37	COPY	O	Inhibit copy information output pin
16	VDD1	-	Power supply pin for VCO part	38	A/$\overline{\text{D}}$	O	Audio/degital data information output pin
17	VCOOUT	-	VCO output (384fs)	39	DAT	O	DAT information output pin
18	VSS1	-	Ground pin for VCO part	40	FS0	O	Sampling frequency information output pin 0
19	CA	-	Pin connected to capacitor for VCO adjustment	41	FS1	O	Sampling frequency information output pin 1
20	CB			42	EMPH	O	Emphasis information output pin
21	PCOUT2	-	Phase comparator output 2	43	ERR	O	Unreaded data information output pin
22	SIGIN	IT	External VCO input pin	44	VCOINH	IT	Input pin for inner VCO osilation stop("H":stop)

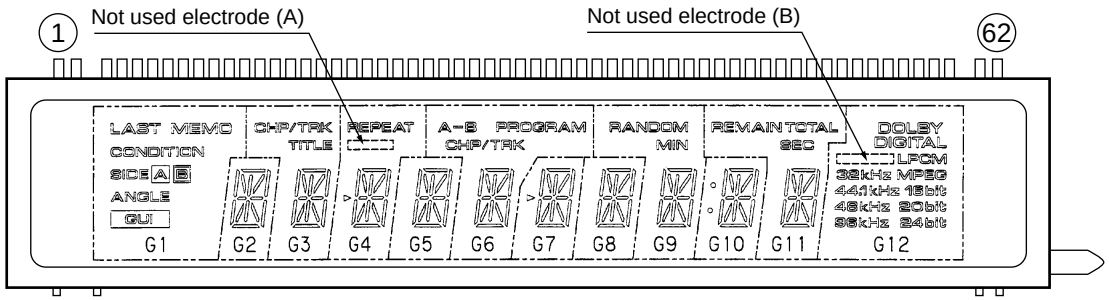
IS:shumitt triger input pin IT:TTL level input pin , O:CMOS level output pin , OT:CMOS level tri-state output pin

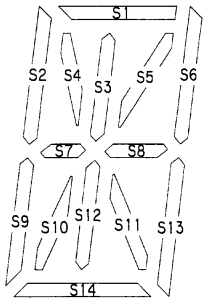
7.1.2 DISPLAY

■ VAW1047 (FLKB ASSY : V401)

- **FL TUBE**

• GRID ASSIGNMENT





G2~G11

• ANODE AND GRID ASSIGNMENT

	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12
S1		S1	S1	S1	S1	S1	S1	S1	S1	S1	S1	
S2		S2	S2	S2	S2	S2	S2	S2	S2	S2	S2	
S3		S3	S3	S3	S3	S3	S3	S3	S3	S3	S3	
S4		S4	S4	S4	S4	S4	S4	S4	S4	S4	S4	*2
S5		S5	S5	S5	S5	S5	S5	S5	S5	S5	S5	DOLBY DIGITAL
S6	LAST MEMO	S6	S6	S6	S6	S6	S6	S6	S6	S6	S6	32kHz
S7		S7	S7	S7	S7	S7	S7	S7	S7	S7	S7	LPCM
S8	CONDITION	S8	S8	S8	S8	S8	S8	S8	S8	S8	S8	MPEG
S9	B	S9	S9	S9	S9	S9	S9	S9	S9	S9	S9	44.1kHz
S10		S10	S10	S10	S10	S10	S10	S10	S10	S10	S10	16bit
S11	A	S11	S11	S11	S11	S11	S11	S11	S11	S11	S11	48kHz
S12	SIDE	S12	S12	S12	S12	S12	S12	S12	S12	S12	S12	20bit
S13	ANGLE	S13	S13	S13	S13	S13	S13	S13	S13	S13	S13	96kHz
S14	GUI	S14	S14	S14	S14	S14	S14	S14	S14	S14	S14	24bit
S15			CHP/TRK	REPEAT		A						
S16						PROGRAM			RANDOM		TOTAL	
S17						-B					REMAIN	
S18				▷			▷			° °		
S19			TITLE	*1		CHP/TRK			MIN		SEC	

*1:Not used electrode (A)
*2:Not used electrode (B)

• PIN ASSIGNMENT

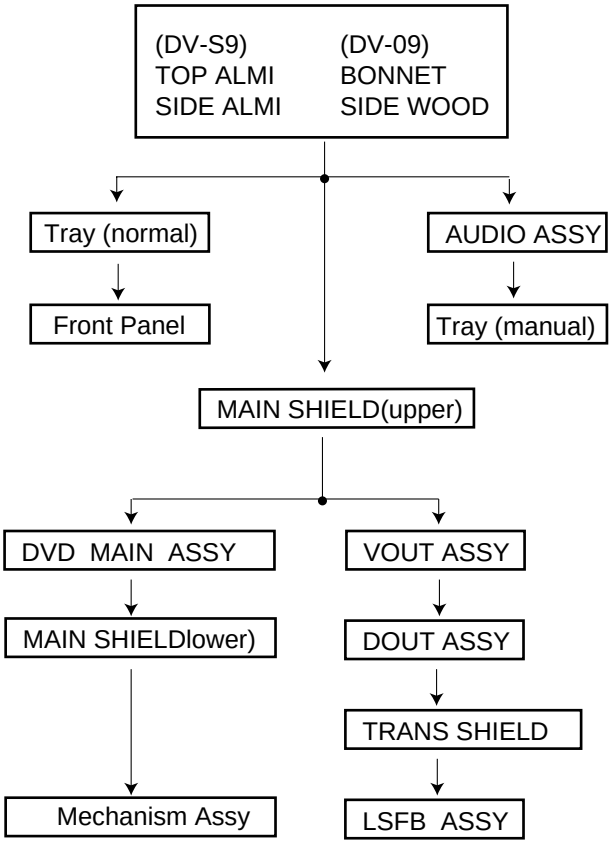
Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14~23	24	25	26	27	28	29	30
Assignment	F1	F1	NP	NL	S19	S18	S17	S16	S15	S14	S13	S12	S11	NL	S10	S9	S8	S7	S6	S5	S4

Pin No.	31	32	33	34	35	36	37	38	39~51	52	53	54	55	56	57	58	59	60	61	62
Assignment	S3	S2	S1	G12	G11	G10	G9	G8	NL	G7	G6	G5	G4	G3	G2	G1	NL	NP	F2	F2

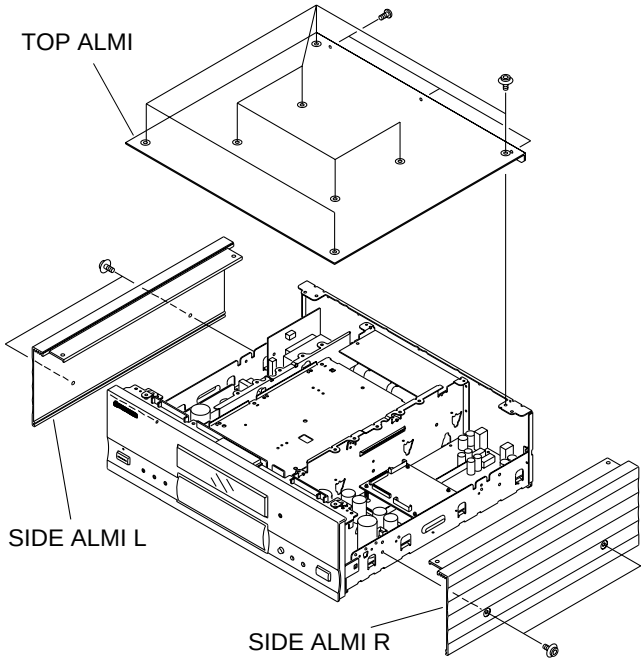
F1,F2:Filament G1~G12:Grid S1~S19:Anode NP:No Pin NL:No Lead

7.2 DISASSEMBLY

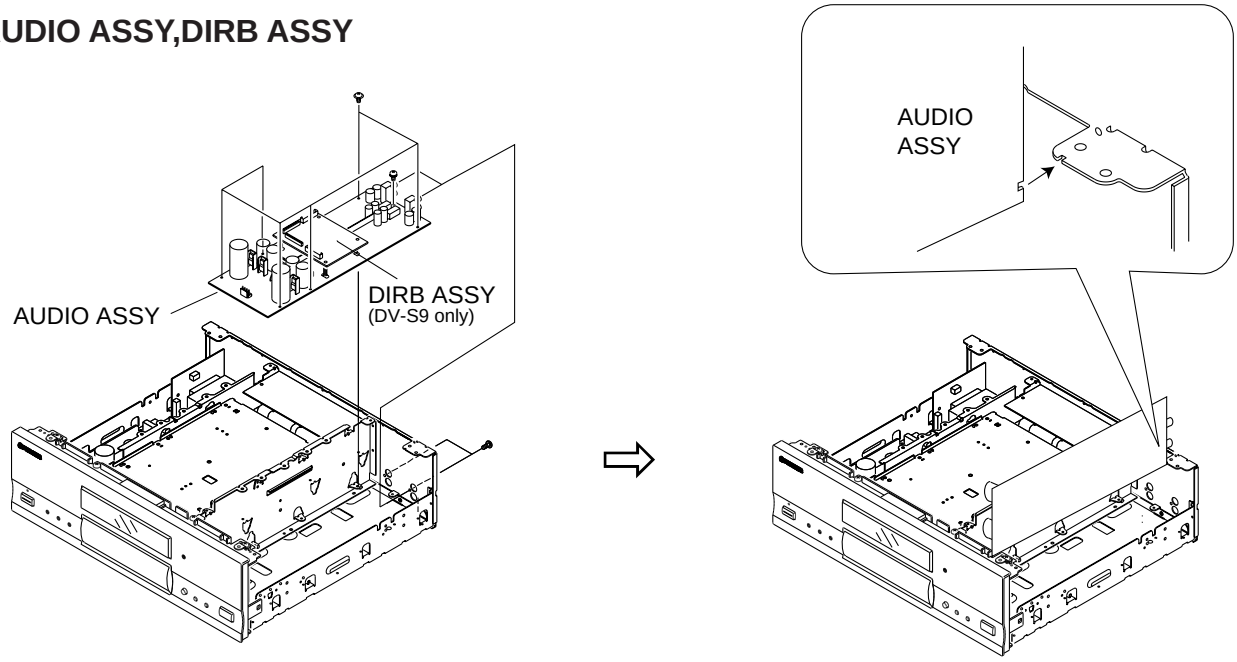
■ Flowchart



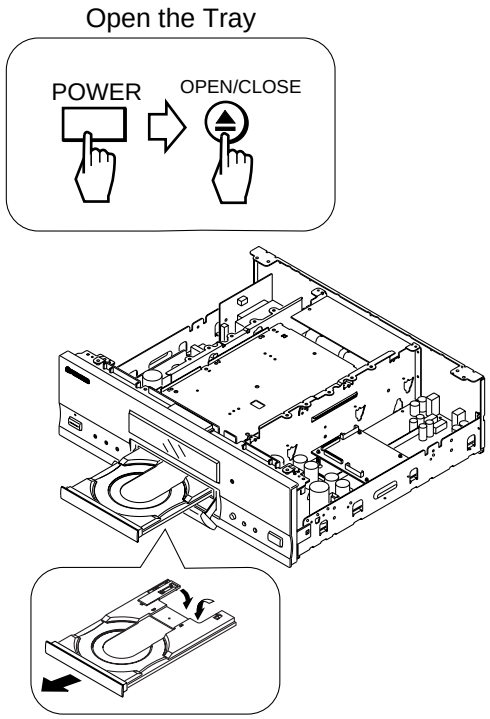
■ Exterior (DV-S9)



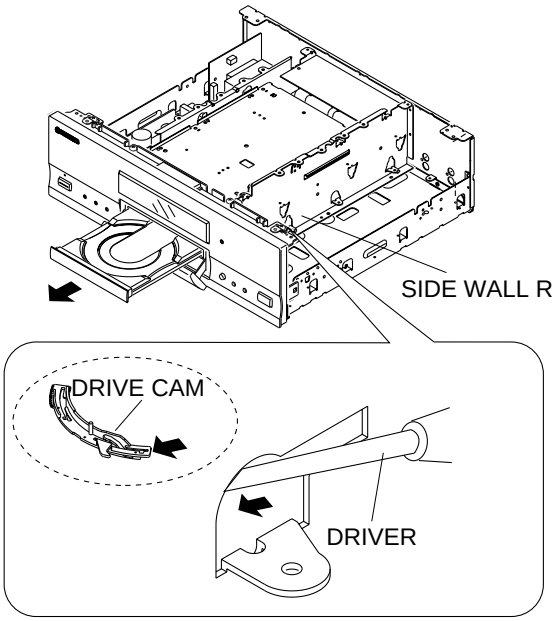
■ AUDIO ASSY,DIRB ASSY



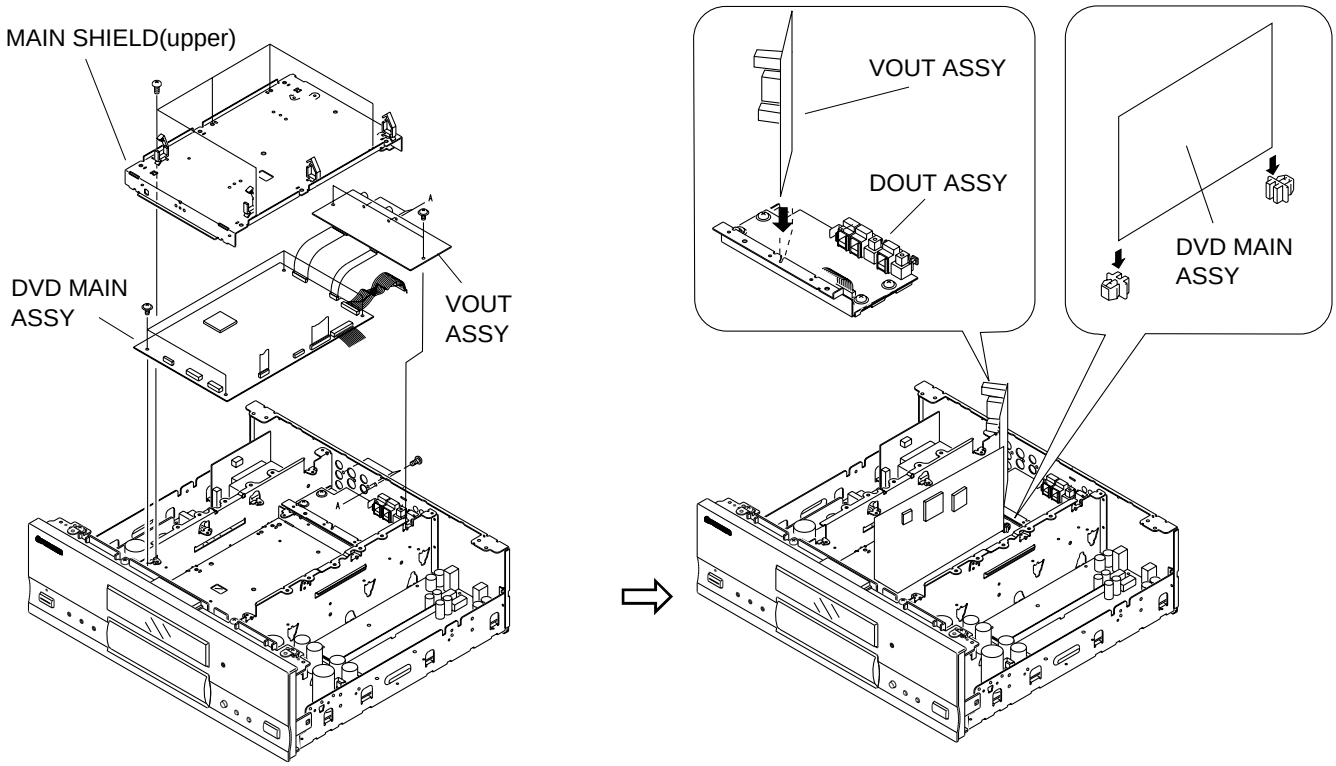
■ Tray(normal)



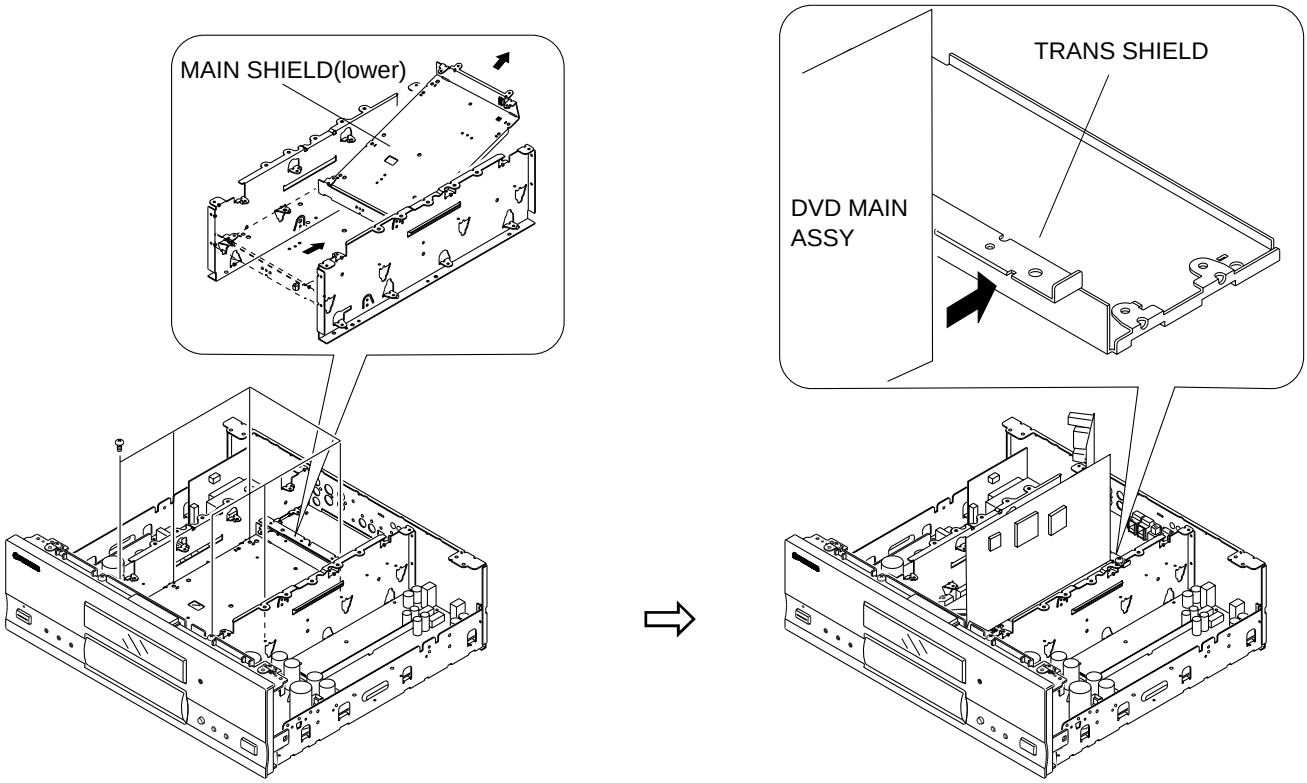
■ Tray(manual)



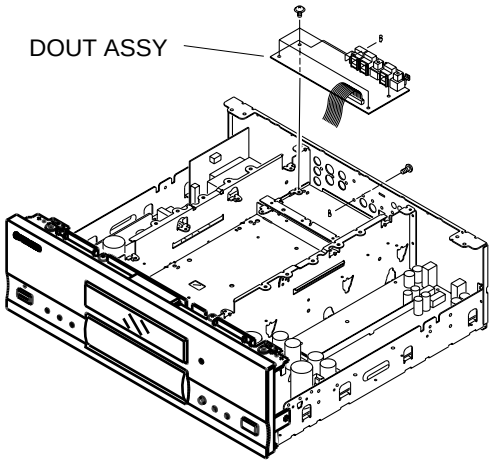
■ DVD MAIN ASSY,VOUT ASSY



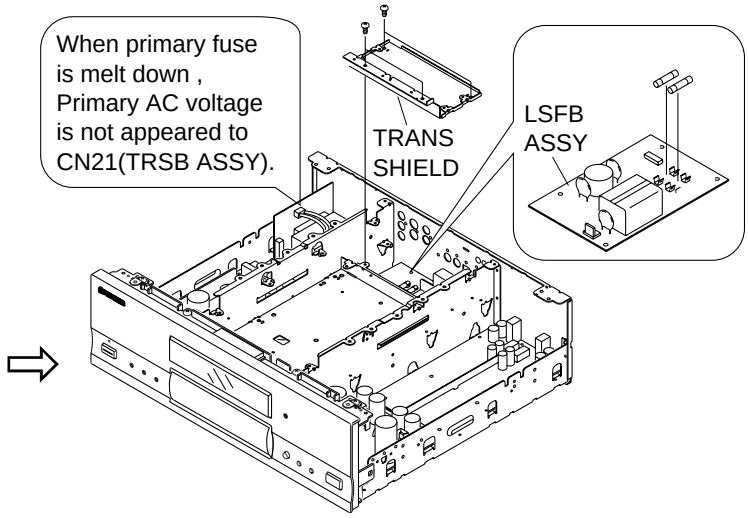
■ MAIN SHIELD(Lower)



■ DOUT ASSY



■ Primary Fuse



■ Loading Mechanism Assy

Remove the tray panel after the tray opened.

⬇

Hold the DVD MAIN Assy on the MAIN SHIELD(lower).

⬇

Turn the short SW to ON position(outside)

⬇

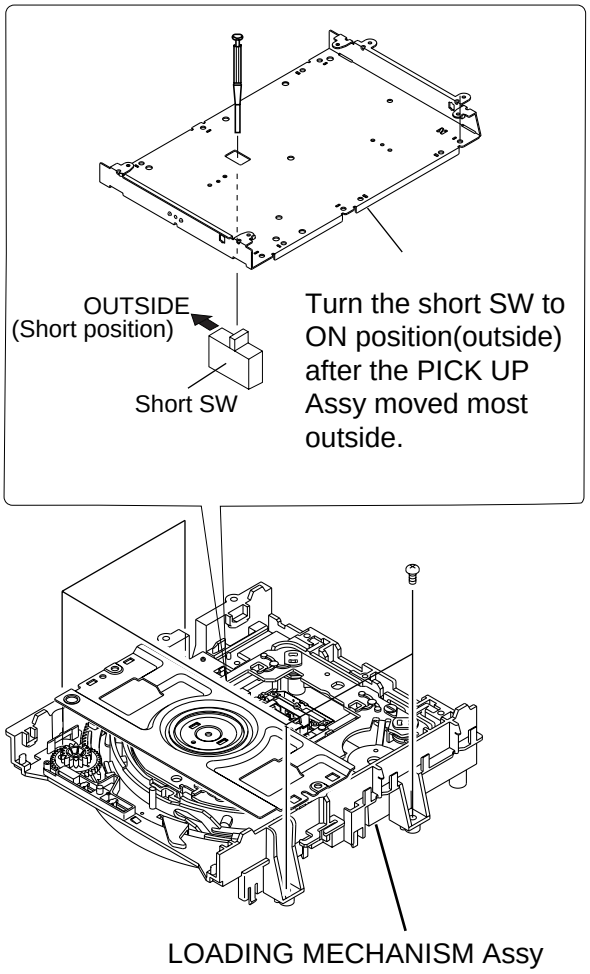
Remove the DVD MAIN Assy .

⬇

Remove the MAIN SHIELD(lower).

⬇

Remove the Mechanism Assy after the tray closed.

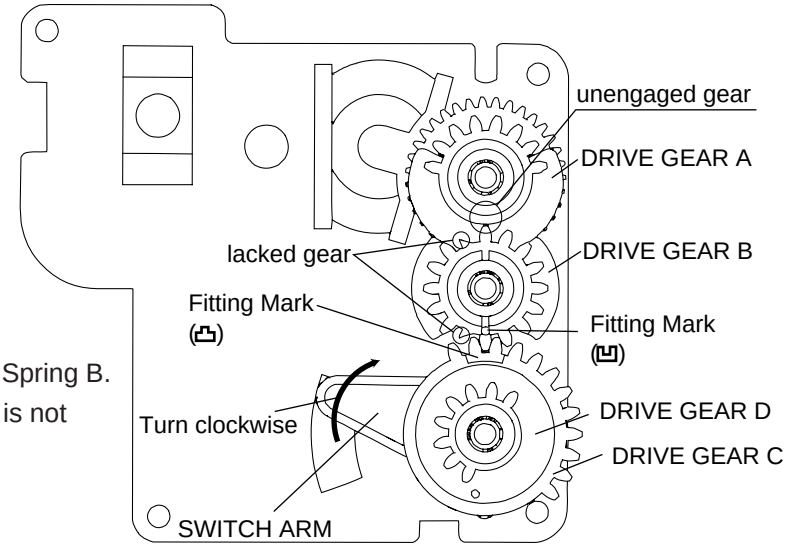

OUTSIDE
(Short position)
Short SW
Turn the short SW to ON position(outside) after the PICK UP Assy moved most outside.
LOADING MECHANISM Assy

■ Assemble DOOR SUPPORT ASSY

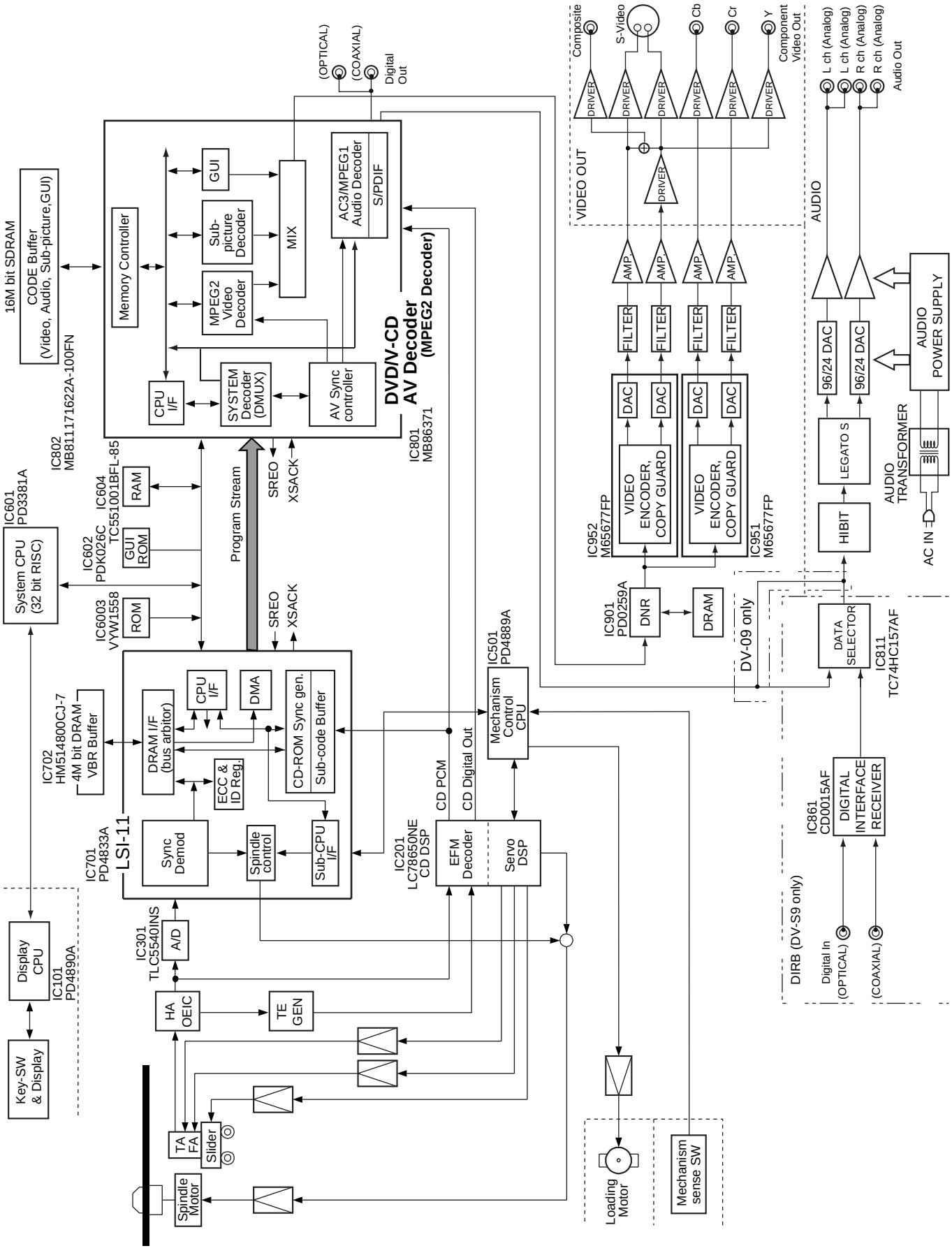
1. Set the Gear Box to the Front Panel with condition like a indicated figure.
2. Set the door support block to the Front Panel with the Door Support opened most outside.

NOTE:

- If it is hard to assemble, remove the Door Spring B.
- It is necessary to set precisely, if the gear is not engaged, the tray will touch the door .



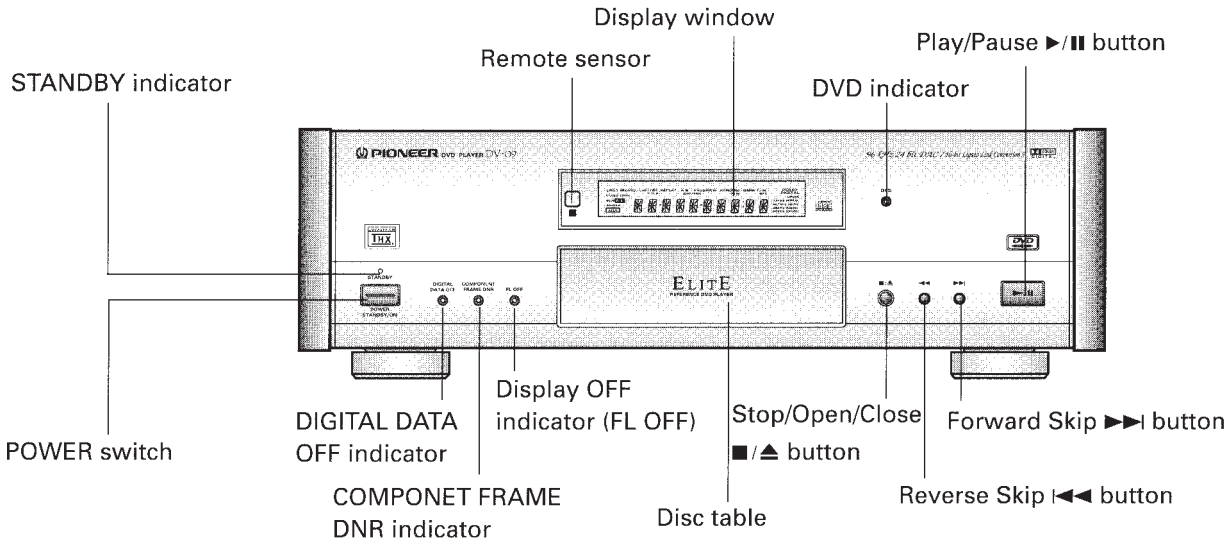
7.3 BLOCK DIAGRAM



8. PANEL FACILITIES AND SPECIFICATIONS

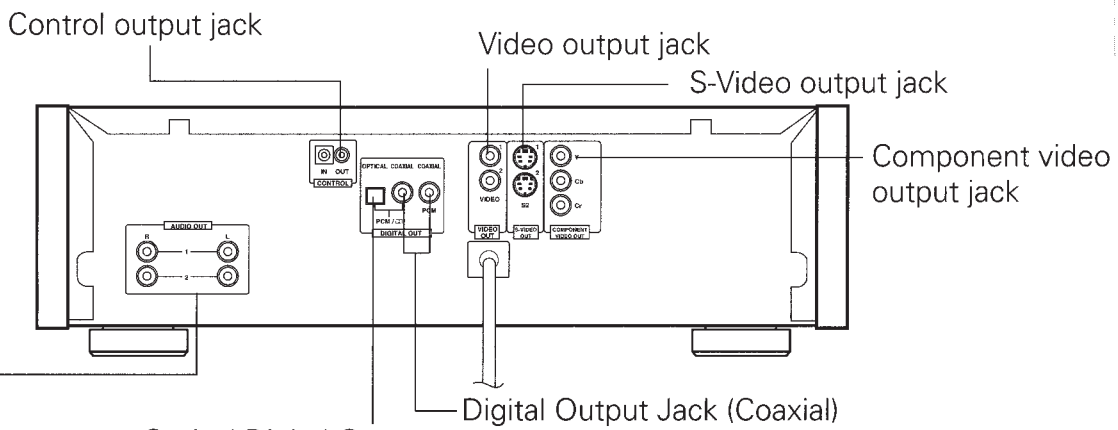
8.1 PANEL FACILITIES

■ FRONT PANEL



■ REAR PANEL

Your amp	Regular AV amp	Coaxial	Connect to the coaxial jack, and select PCM from the menu.
		Optical	Connect to the optical jack, and select PCM from the menu.
	AC-3 compatible amp	Coaxial	Connect to the PCM/ DD jack, and select PCM/DOLBY DIGITAL•DTS from the menu.
		Optical	Connect to the optical jack, and select PCM/DOLBY DIGITAL•DTS from the menu.
	DTS compatible amp	Coaxial	Connect to the coaxial jack, and select PCM/DOLBY DIGITAL•DTS from the menu.
		Optical	Connect to the optical jack, and select PCM/DOLBY DIGITAL•DTS from the menu.



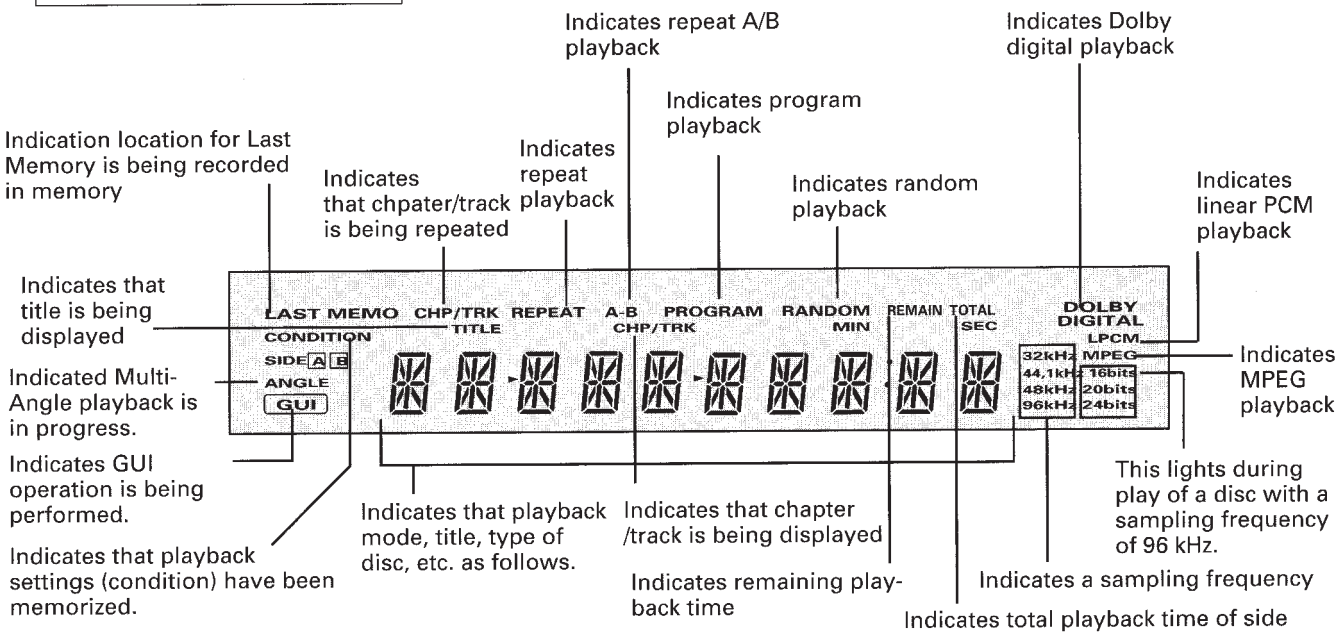
Audio output jacks
There are two sets of outputs, 1 and 2, which you can simultaneously connect. Connect 1 to the TV, and 2 to your AV amp.

Optical Digital Output (Optical)
Audio optical digital output. Switchable between PCM/ DOLBY DIGITAL•DTS and PCM output.

Digital Output Jack (Coaxial)
PCM jack is used for output of the digital audio signal recorded on CDs and Video CDs. Depending on the components connect this digital output to, noise may be generated.
When connecting to an AC-3 compatible amp or DTS compatible amp, use the PCM/DD jack. (Refer to the chart on the above)

■ DISPLAY WINDOW

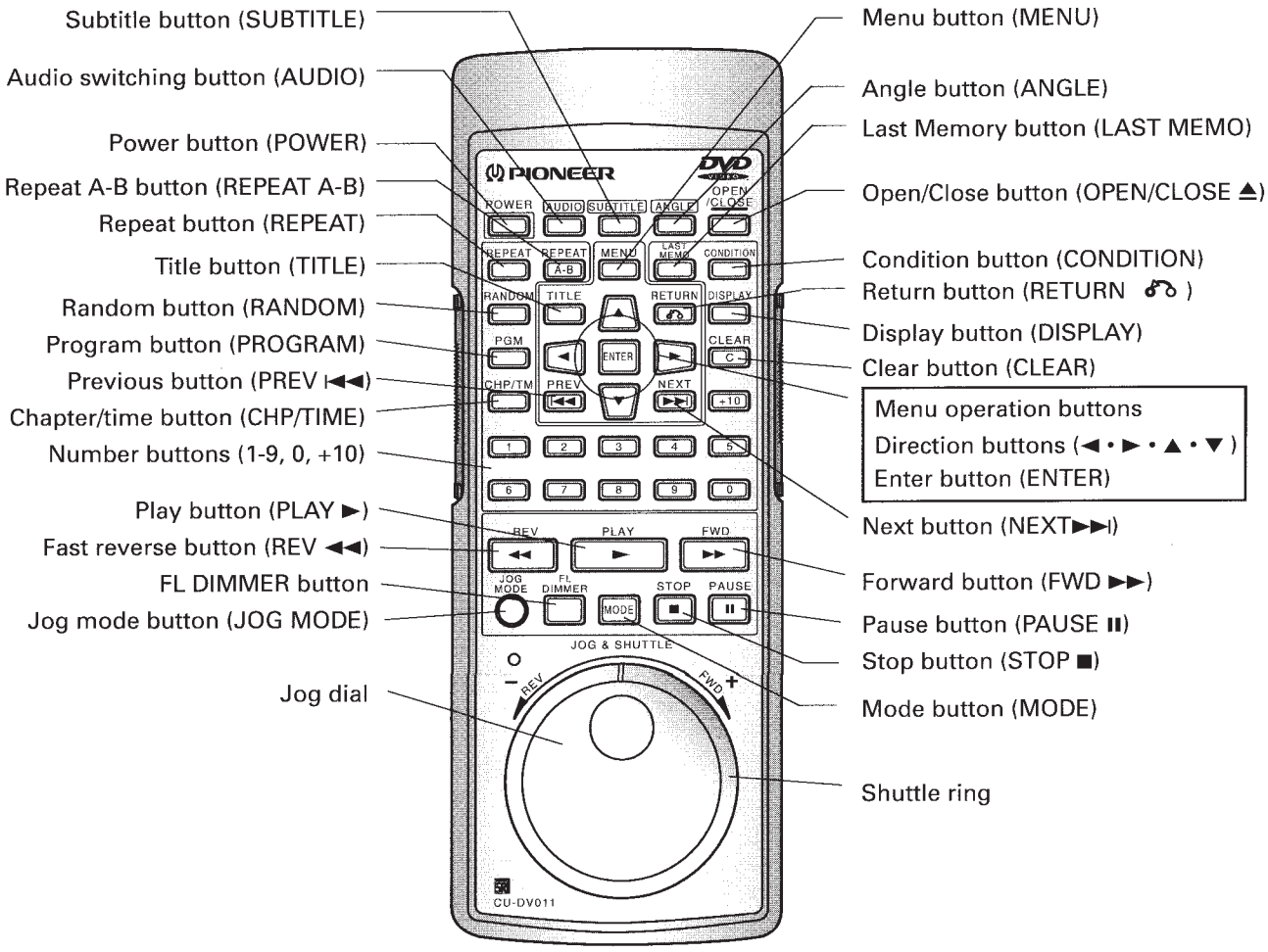
When the remote control's FL DIMMER button is pressed, the brightness of the display window will change as follows.
Bright → Not so bright → Dim → OFF



Sample Display

CD	:Compact disc	MENU	:Menu mode
DVD	:DVD	TITLE	:Title menu
VCD	:Video CD	SETUP	:Set-up menu
PBC PLAY	:Playback control playback on Video CD	COND_MEM	:Condition memory
OPEN	:Disc table is opening or is open	LAST_MEM	:Last memory
CLOSE	:Disc table is closing		
PLAY	:Playback		
STOP	:Stop		
-- OFF --	:Power is turned off		

■ REMOTE CONTROL



8.2 SPECIFICATIONS

(FOR DV-09)

General

System ..... DVD system, Video CD and Compact Disc digital audio system
Laser ..... Semiconductor laser: wavelength 650 nm
Power requirements: ..... AC 120 V, 60 Hz
Power consumption ..... 52 W
Weight ..... 15.8 kg (34 lb 13 oz)
Dimensions ..... 460 (W) x 370 (D) x 144 (H) mm ($18\ ^{1}/_{8}$ x $14\ ^{9}/_{16}$ x $5\ ^{11}/_{16}$ in.)
(Not including protruding cables, etc.)
Operating temperature ..... +5°C to +35°C (+36°F to +96°F)
Operating humidity ..... 5% to 85% (no condensation)

S-Video Output (2 pairs)

Y (luminance) - Output level ..... 1 Vp-p (75Ω)
C (color) - Output level ..... 286 mVp-p (75Ω)
Jacks ..... S-VIDEO jack

Video Output (2 pairs)

Output level ..... 1 Vp-p (75Ω synchronous negative)
Jacks ..... RCA

Component Video Output

Output level ..... Y:1 Vp-p (75Ω synchronous negative)
C (color) - Output level ..... Cb,Cr: 0.7 Vp-p (75Ω)
Jacks ..... RCA jacks

Audio Output (2 pairs)

Output level
During audio output ..... 200 mVrms (1 kHz, –20 dB)
Number of channels 2
Jacks ..... RCA

Digital audio characteristics

Frequency response	4 Hz to 44 kHz (DVD fs: 96 kHz) 4 Hz to 22 kHz (DVD fs: 48 kHz) 4 Hz to 20 kHz (CD)
S/N ratio	115 dB (EIAJ)
Dynamic range	108 dB (EIAJ)
Total harmonic distortion	0.002 %
Wow and flutter	Limit of measurement (±0.001% W. PEAK) or lower (EIAJ)

Other Terminals

Optical digital output (PCM/ DD /DTS) ..... Optical digital jack
Coaxial digital output (PCM/ DD /DTS) ..... RCA jack
Coaxial digital output (PCM) ..... RCA jack
CONTROL IN /OUT ..... Minijack (3.5ø)

Accessories

Remote control unit 1
AAA (R03) dry cell batteries 2
Audio cord 1
Video cord 1
Operating Instructions 1
Warranty card (Region number ① only) 1

NOTE:

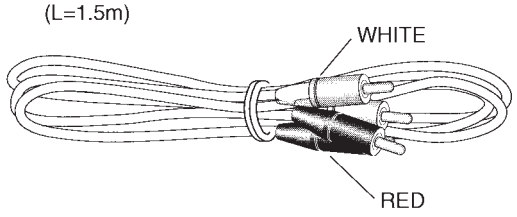
The specifications and design of this product are subject to change without notice, due to improvement.

"Dolby, Digital (AC-3)" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

■ Accessories

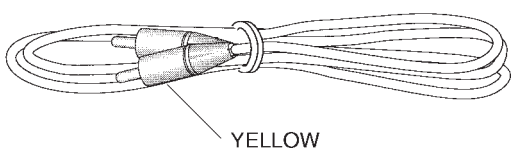
Audio cord

VDE1023
(L=1.5m)



Video cord

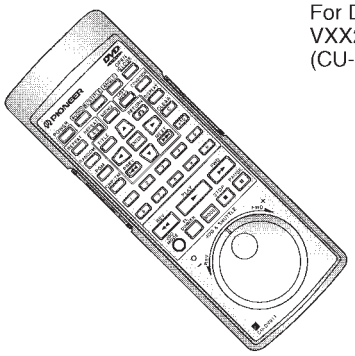
VDE1024
(L=1.5m)



Remote control unit

For DV-09
VXX2532
(CU-DV011)

For DV-S9
VXX2525
(CU-DV010)



Other included items:

- Warranty card
  (Region number ① modesl only)
- Operating Instructions

Batteries....2